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ABSTRACT

This Study examined the relationships between certain teacher characteristics and changes manifested by gifted elementary students in convergent and divergent thinking areas. It was assumed that teachers' intellectual ability, personality and personal experience were the most influential variables affecting pupil growth. Conclusions showed that (1) teacher characteristics do influence significantly the growth of fourth, fifth, and sixth grade self-contained classes with a mean I.Q. of 120 or better; (2) no single teacher characteristic was significantly related to all areas of convergent and divergent growth in the children's scores than were the other variables studied; (4) in general, the teacher who appeared to have most significantly influenced growth in the divergent areas were emotionally mature, energetic, persistent, friendly, and without a crystallized compulsive pattern for attaining social approval; and (5) in general, the teacher who appeared ot have most significantly influenced growth in the convergent area was submissive, dependent, cheerful, alert, not a staunch guardian of morals and manners with a natural warmth and liking for people. (TA)

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FINAL REPORT

Project No. S-348
Contract No. OE-5-10-399

THE RELATIONSHIPS BETWEEN CERTAIN TEACHER CHARACTERISTICS AND ACHIEVEMENT AND CREATIVITY OF GIFTED ELEMENTARY SCHOOL STUDENTS

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INTRODUCTION

Problem

The past decade has witnessed an immense growth in the concern educators and lay public alike have shown for that segment of the population described as gifted children. Public schools are developing special programs and classes to foster the development of bright youngsters. Universities are offering an increasing number of courses related to understanding and educating these children. A recent survey by the Association for the Gifted verifies the fact that universities are involved in establishing a sequential training program for teachers of gifted students. (12) Martinson indicates that more than 50, 000 specially trained teachers are needed for work with these children. (13)

In the past a variety of criteria for selecting teachers of the gifted have been used. Attributes such as emotional stability, giftedness, and teaching experience in regular classes are recommended in the literature (1, 13). School personnel frequently think that any good teacher should be able to teach a gifted class with competence (9). Some school systems choose their "best" teachers. Some rotate their teachers so that all of them have an opportunity to work with the bright group every few years. However, there is no empirical data to support or refute the various bases of teacher selection.

It is the purpose of this study to examine the relationships between certain teacher characteristics and changes manifested by gifted elementary students in convergent and divergent thinking areas. It is assumed by the investigator that teachers' intellectual ability, personality and personal experience are those characteristics that are the most influential variables affecting pupil growth. It is expected that the results of the present investigation will provide information that will be useful in the future selection of teachers of gifted elementary school children.

Background

In a survey of the literature no research was discovered regarding the qualifications necessary for teachers of gifted elementary school children. Lists of descriptive words and phrases are so general, it would be impossible to define them specifically and have educators agree. Examples of such qualifications are: "Creativeness.....Psychological maturity.....

Skill in human relations..... Freedom from excessive sensitivity to criticism..... Understanding and acceptance of children..... Broad experience in teaching children..... Knowledge of child development....." (1)

Ward states that "teachers of intellectually superior children and youth should be among those of the greatest general excellence to be found in the profession." (15). Among the criteria essential for teachers of gifted youngsters according to Cutts (6) are great vitality, a sense of humor and stability. French (11) in comparing teachers of the gifted to other teachers suggests that the teachers of the gifted should be more intelligent, more flexible, more creative, better informed in a wide variety of areas, and desirous of teaching gifted students. Wirick (16) has a slightly different emphasis when he proposes that teachers of the gifted should be as bright as the most able in at least one field, secure working with the gifted, a missionary-type, a successful teacher, and specially trained in the area of the gifted.

According to Davis (7) and Freehill (10), one of the reasons for absence of special preparation and special certification requirements for teachers of the gifted is the lack of agreement about the qualifications these teachers should possess. Martinson (13) mentions the importance of establishing criteria to identify students to be trained to teach the gifted. In the December, 1959 Review of Educational Research, (8), Fliegler and Bish pointed out the need for research in this area. In the February, 1963 Review of Educational Research, (2) Birch and Reynolds state that the research needs discussed in the 1959 issue had not be satisfied, but instead intensified.

In summary, there is much in the literature describing the attributes that can logically be assumed as necessary for teachers working with gifted classes. However, there is a dearth of empirical data proving specifically what is important and desirable.

Objectives

This study investigates the relationships between certain teacher characteristics and change manifested by gifted elementary students in convergent and divergent thinking areas.

For the purposes of this study the 16 Personality Factor Questionnaire (4) will be assumed to reflect teacher personality.

It is assumed that an adequate measure of the children's convergent production will be derived from a standardized achievement test. The assumption is also made that divergent production is most adequately assessed by the use of fluency, flexibility, originality and elaboration scores obtained from a test of creative thinking.

The specific questions to be answered are:

(1) What effect does teacher intelligence, personality, and personal information (e. g. age, training, experience, marital status) have on the quantity and quality of change exhibited by classes of gifted elementary students in the area of convergent production?

(2) What effect does teacher intelligence, personality, and personal information have on the quantity and quality of change exhibited by classes of gifted elementary students in the areas of divergent production?

METHODS

This study was designed to determine the effect certain teacher characteristics have upon their classes of elementary gifted children in intermediate grades. An investigation was made into the relationship between the described teacher characteristics and the class growth in six convergent production areas (reading, writing, mathematics, science, social studies, listening) and four divergent production areas (fluency, flexibility, originality, elaboration).

The subjects in this study were to be the students and teachers of 50 self-contained intermediate, elementary gifted classes (grades four, five, and six), located throughout the State of North Carolina. Of the original 50 classes 37 actually participated in the study. The loss of 13 classes was due to:

1. The inability of classes to cooperate because of extensive testing programs being carried out in their area at the time of this study.

2. Administrative rearrangements that resulted in classes no longer being self-contained groups of high intellectual level.

In order to assure homogeneity of the classes the California Test of Mental Maturity (14) was administered to all children involved. Those classes below the mean I. Q. of 120 were not included. Language, non-language, and total scores were employed for making these decisions.

Of the 37 classes remaining in the study 13 were eliminated because they did not meet this standard. One was eliminated because the data returned were incomplete. Two classes failed to assess the students in the divergent areas. Consequently these classes were involved only in the convergent areas.

The gifted classes in North Carolina are under the direction of the local school systems and the teachers for these classes are selected by the local systems. It may, therefore, be assumed that teacher selection criteria are not uniform. Consequently, it is logical to expect that variation will be found among the teachers in respect to the characteristics being studied.

The characteristics of the teachers were assessed by measures of:

(1) Intelligence
Adult form of the California Test of Mental Maturity (14).

(2) Personality Factors
The 16 Personality Factor Questionnaire (4).

(3) Personal Information
A questionnaire involving age, sex, training, experience, marital status, number of children, etc. (Appendix A).

The growth of the gifted classes were assessed by measures of:
(1) Convergent Production
Level 4, alternate forms of the Sequential Test of Educational Progress (5).

(2) Divergent Production
Minnesota Test of Creative Thinking: Abbreviated Form VII (3).

The instruments measuring convergent and divergent production were administered by pre- and post-testing of the children. All pre-testing took place during October of 1964 and all post-testing during May of 1965.

The relationship between the changes in class scores in each of the ten production areas and the following variables were investigated:

A. 16 measures of teacher personality

1. Aloof vs. Sociable
2. Boorish vs. Cultured
3. Emotional Immaturity vs. Emotional Stability
4. Submission vs. Dominance
5. Serious vs. Happy-go-lucky
6. Lack of Rigid Internal Standards vs. Super Ego Strength
7. Timid vs. Adventurous
8. Tough-minded vs. Sensitive
9. Accepting vs. Suspecting
10. Conventional vs. Unconventional
11. Naive vs. Sophisticated
12. Confident vs. Insecure
13. Conservatism vs. Radicalism
14. Group Dependency vs. Self-Sufficiency
15. Uncontrolled vs. Controlled
16. Phlegmatic vs. Excitable

B. 14 items of teacher background

1. Verbal I. Q.
2. Non verbal I. Q.
3. Age
4. Social-economic level of family
5. Social-economic level of teacher
6. Marital status
7. Presence or absence of children
8. Years of formal education
9. Years of teaching (excluding gifted)
10. Years of teaching gifted
11. Credit hours in courses concerning gifted
12. Grade level (4, 5, or 6)
13. Number of students in the class
14. Rural or urban location

C. 4 items identifying the composition of each of the classes.

1. Sex
2. Age
3. Verbal I. Q.
4. Non-verbal I. Q.

A series of multiple regression equations was calculated to assess the relationship between the changes in class convergent and divergent production scores and the three sets of variables just enumerated. A total of 30 equations were developed, as follows:

a) An equation for each production change versus teacher personality items (10 equations).
b) An equation for each production change versus teacher background items (10 equations).
c) An equation for each production change versus class items (10 equations).

The equation model used is: $Y=B.+B_2.X(2)+B_3.X(3)+B_4.X(4)+B_5.X(5)+B_6.X(6)+B_7.X(7)+B_8.X(8)+B_9.X(9)+B_{10}.X(10)+B_{11}.X(11)+B_{12}.X(12)+B_{13}.X(13)+B_{14}.X(14)+B_{15}.X(15)+B_{16}.X(16)+B_{17}.X(17)$. Y is the change in class score. B is the regression coefficient. X is the variable.

All items could not be grouped together in a single equation. The 23 classes and the total of 34 teacher-and-student-related class items were more than could be simultaneously calculated. Thus the related items were grouped into the three sets described above for the initial regression calculations.

For each measure of change, all items that proved significant at the one percent level (Student's t of 2.58 or higher) were grouped together for the development of a final regression analysis, leading to an influence profile for each change.

RESULTS

The mean and standard deviation of each of the 34 variables involving the 23 teachers and their classes are reported in Tables 1, 2, and 3. Since there were 23 classes studied in the convergent areas and 21 classes studied in the divergent areas, there is a slight difference in the means and standard deviations of the two groups. The means reported on the first 30 variables are weighted averages that take into account the number of children studied in each teacher's class. The remaining four variables concern individual student's, not classes, so their means are not weighted. (For all individual student data, see Appendix D.)

The variables described in Table 1 are on a 10-point scale. For each pair of those variables the one at the zero end of the scale is named first.

In Table 2, variable 4 was judged on a four-point scale in which a "1" was arbitrarily set to indicate least skill and a rating of "4" to indicate most skill. The occupations judged to be within each rating are as follows:

1. Farmer, letter carrier
2. Photographer, clerk, salesman
3. Business owner, business manager, minister
4. Company president

Similarly, in Table 2, variable 5 was judged on a five-point scale as follows:

1. under $5000
2. $5000 to $10, 000
3. $10, 000 to $15, 000
4. $15, 000 to $20, 000
5. over $20, 000

The other variables in Table 2 were quantified as follows:

Variable 6: single=0, married=1
Variable 7: childless=0, children=1
Variable 14: rural=0, urban=1
Variables 1, 2, 3, 8, 9, 10, 11, 12, 13: actual numbers

Table 1
Means and Standard Deviations of the Teacher Personality Items

Variable	Average for Divergent Areas	Standard Deviation for Divergent Areas	Average for Convergent Areas	Standard Deviation for Convergent Areas
1. Aloof vs. Sociable	6.28	1.69	6.17	1.66
2. Boorish vs. Cultured	5.75	1.68	5.74	1.61
3. Emotional Immaturity vs. Emotional Stability	6.00	1.61	6.10	1.68
4. Submission vs. Dominance	5.01	1.95	5.29	2.12
5. Serious vs. Happy-go-lucky	4.67	1.50	4.77	1.50
6. Lack of Rigid Internal Standards vs. Super Ego Strength	6.82	1.44	6.85	1.49
7. Timid vs. Adventurous	6.05	1.84	6.17	1.81
8. Tough-minded vs. Sensitive	6.77	1.98	6.80	1.99
9. Accepting vs. Suspecting	3.89	1.63	3.76	1.68
10. Conventional vs. Unconventional	5.41	1.18	5.60	1.36
11. Naive vs. Sophisticated	5.91	1.80	6.13	1.88
12. Confident vs. Insecure	4.88	1.61	4.67	1.74
13. Conservatism vs. Radicalism	5.22	1.43	5.46	1.46
14. Group Dependency vs. Self-Sufficiency	5.34	1.47	5.48	1.48
15. Uncontrolled vs. Controlled	7.23	1.79	7.13	1.75
16. Phlegmatic vs. Excitable	4.89	1.66	4.81	1.64

Table 2
Means and Standard Deviations of Teacher Background Information

Variable	Average for Divergent Areas	Standard Deviation for Divergent Areas	Average for Convergent Areas	Standard Deviation for Convergent Areas
1. Verbal I. Q.	102. 28	10. 90	101. 68	11. 94
2. Non-verbal I. Q.	85. 01	18. 13	84. 77	17. 75
3. Age	41. 22	11. 54	40. 63	11. 30
4. Socio-economic level judged by father's occupation	2. 07	0. 99	2. 15	0. 99
5. Yearly income of teacher (and husband if married)	2. 68	0. 97	2. 67	0. 94
6. Marital status	0. 96	0. 20	0. 92	0. 28
7. Teacher is childless or has children	0. 59	0. 49	0. 54	0. 50
8. Years of formal education	16. 54	0. 58	16. 54	0. 57
9. Years of teaching (excluding the gifted)	9. 98	6. 60	9. 64	6. 42
10. Years of teaching the gifted	2. 28	2. 02	2. 14	2. 00
11. Credit hours in courses concerning gifted	0. 48	0. 79	0. 48	0. 77
12. Grade presently teaching	5. 11	0. 82	5. 15	0. 81
13. Number of students in the class	25. 77	3. 82	25. 56	3. 77
14. Rural or urban location	0. 67	0. 47	0. 70	0. 46

In Table 3, variable 1, sex, was quantified as follows:

male=0, female=1

Tables 4 and 5 present those relationships significant at the one percent level (t= 2. 58) between the above teacher and pupil variables and the pupil's change in scores on the four divergent measures and six convergent measures over the course of one school year. Both t and b values are indicated (b predicts the unit change in test score for each point of change in the variable). The t values for all 340 relationships evaluated are found in Appendix B. Among the 340 relationships studied, 77 proved significant at the one percent level.

Those 77 variables that proved significant, and are represented in Tables 4 and 5, were again examined in a regression analysis. The results of the final regression analysis are shown in Table 6. Those scores significant at the one percent level are underscored. All data concerning the final regression can be found in Appendix C.

Table 3
Means and Standard Deviations of Student Characteristics

Variable	Average for Divergent Areas	Standard Deviation for Divergent Areas	Average for Convergent Areas	Standard Deviation for Convergent Areas
1. Sex	0. 53	0. 50	0. 51	0. 50
2. Age (in months)	126. 44	10. 25	126. 87	10. 12
3. Verbal I. Q.	124. 58	7. 12	125. 33	7. 75
4. Non-verbal I. Q.	121. 99	9. 67	122. 74	10. 44

Table 4
Significant t Scores and the Corresponding b Values for the Divergent Measures

Variable	Fluency		Flexibility		Originality		Elaboration	
	b	t	b	t	b	t	b	t
1. Aloof vs. Sociable			1.08	3.30	2.50	4.05		
2. Emotional Immaturity vs. Emotional Stability	3.73	3.47	2.12	3.79	3.47	3.29	8.13	3.58
3. Lack of Rigid Internal Standards vs. Super Ego Strength	5.18	4.04	2.58	3.86	4.05	3.22	7.71	2.85
4. Timid vs. Adventurous	-3.20	-3.94			-2.75	-3.45	-4.43	-2.59
5. Tough-minded vs. Sensitive			-1.34	-3.83				
6. Accepting vs. Suspecting			-1.98	-3.76	-2.68	-2.71		
7. Conventional vs. Unconventional			2.33	3.72				
8. Naive vs. Sophistocated			0.99	2.69				
9. Group Dependency vs. Self-Sufficiency			3.35	4.90				
10. Uncontrolled vs. Controlled	-3.80	-4.24	-2.31	-4.95	-2.84	-3.23	-6.53	-3.46
11. Verbal I. Q.	0.62	3.82	0.33	3.87	0.66	4.17		
12. Non-verbal I. Q.	-0.26	-3.13	-0.11	-2.64				
13. Years of formal education					-17.42	-3.33		
14. Credit hours in courses concerning gifted	8.94	2.88	4.43	2.71	10.06	3.30		
15. Grade presently teaching							-7.92	-3.08
16. Number of students in class							-1.58	-2.78
17. Sex	5.08	3.82	1.97	2.81				

Table 5
Significant t Scores and the Corresponding b Values for the Divergent Measures

Variable	Math		Science		Social Studies		Reading		Listening		Writing	
	b	t	b	t	b	t	b	t	b	t	b	t
1. Aloof vs. Sociable			1.44	2.94			1.71	3.58				
2. Emotional Immaturity vs. Emotional Stability	-1.33	-3.68									-2.09	-4.48
3. Submission vs. Dominance			-1.82	-4.25	-1.28	-4.53	-1.17	-2.79				
4. Serious vs. Happy-go-lucky			2.31	3.89	1.38	3.49	2.43	4.19				
5. Lack of Rigid Internal Standards vs. Super-Ego Strength			-2.59	-4.65	-1.11	-3.02						
6. Timid vs. Adventurous											1.79	3.99
7. Tough-minded vs. Sensitive							1.15	2.89			1.54	4.92
8. Accepting vs. Suspecting											1.64	4.03
9. Conventional vs. Unconventional			1.89	3.53								
10. Naive vs. Sophistocated			-1.99	-5.47	-1.31	-5.45	-2.28	-6.44				
11. Phlegmatic vs. Excitable	-1.60	-5.30										
12. Verbal I.Q.							0.36	3.64				
13. Age			0.40	3.69							-0.38	-4.64
14. Socio-economic level judged by fathers' occupation	-1.45	-2.97										
15. Yearly income of teacher (and husband if married)									2.48	2.62	2.52	2.63
16. Teacher is childless or has children											4.81	2.58
17. Years of teaching (excluding the gifted)									-0.40	-3.01		
18. Years of teaching the gifted							2.19	3.09	1.55	2.81		
19. Credit hours in courses concerning gifted											5.15	3.08
20. Grade presently teaching	-1.81	-3.65									-2.25	-3.02
21. Number of students in the class	-0.29	-3.06					0.60	3.32			-0.39	-0.27
22. Rural or urban location									-5.55	-3.20		
23. Age	-0.10	-3.79			-0.09	-2.61					-0.23	-5.59

Table 6
Influence Profile of the 77 Significant Variables

Variable	Fluency		Flexibility		Originality		Elaboration		Math		Science		Social Studies		Reading		Listening		Writing	
	b	t	b	t	b	t	b	t	b	t	b	t	b	t	b	t	b	t	b	t
1. Aloof vs. Sociable			0.97	2.54	0.98	1.70					0.99	2.64			0.88	2.39			-0.65	-1.86
2. Emotional Immature vs. Emotional	1.75	2.78	0.96	2.52	2.60	3.93	3.59	2.55	-0.87	-3.40										
3. Submission vs. Dominance											-2.13	-6.96	-0.87	-4.68	-0.41	-1.28				
4. Serious vs. Happy-go-lucky											2.21	4.84	1.16	4.27	1.03	2.60				
5. Lack of Rigid Internal Standards vs. Super-Ego Strength	1.94	2.81	0.56	1.67	3.09	3.39	4.09	2.77			-2.53	-6.21	-0.92	-3.71						
6. Timid vs. Adventurous	-1.25	-2.11			-3.13	-3.77	-2.90	-2.38											1.28	3.35
7. Tough-minded vs. Sensitive			-0.91	-2.77											1.16	3.77			0.41	1.37
8. Accepting vs. Suspecting			-0.93	-2.64	-1.67	-2.71													0.59	1.80
9. Conventional vs. Unconventional			2.11	4.25							1.67	3.74								
10. Naive vs. Sophistocated			-0.80	-2.53							-2.24	-7.51	-1.03	-5.27	-2.39	-6.56				
11. Group Dependency vs. Self-Sufficiency			2.22	3.67																
12. Uncontrolled vs. Controlled	-1.21	-2.18	-1.28	-3.02	-1.51	-2.41	-3.92	-3.45												
13. Phlegmatic vs. Excitable									-0.51	-2.21										
14. Verbal I.Q.	0.19	1.85	0.16	2.74	0.16	1.82									0.20	4.49				
15. Non-verbal I.Q.	-0.08	-1.32	-0.11	-2.51																
16. Age											-0.05	-0.79							-0.07	-0.97
17. Socio-economic level judged by fathers' occupation									0.15	0.43										
18. Yearly income of teacher (and husband if married)																	0.31	0.55	1.67	2.91
19. Teacher is childless or has children																			1.62	0.89
20. Years of formal education					-6.16	-2.39											0.03	0.28		
21. Years of teaching (excluding the gifted)															-0.03	-0.08	0.14	0.57		
22. Years of teaching the gifted																			1.83	2.71
23. Credit hours in courses concerning gifted	1.85	1.97	0.67	1.35	3.45	2.40													-2.85	-2.14
24. Grade presently teaching							-1.77	-0.88	-0.25	-0.29					-0.31	-1.50			-0.19	-1.48
25. Number of students in class							-0.69	-1.68	-0.25	-3.29							-0.72	-0.71		
26. Rural or urban location																				
27. Sex	4.98	3.83	1.70	2.48					-0.03	-0.52			-0.07	-1.93					0.02	0.23
28. Age																				

Discussion

This study has shown that teacher characteristics do significantly influence the growth of fourth, fifth, and sixth grade self-contained classes with a mean I. Q. of 120 or better. However, there was no single teacher characteristic that was significantly related to all areas of convergent and divergent growth in the students. Characteristics of the students themselves proved important only in relation to fluency. In this area girls were shown to be more fluent than boys. In addition, the number of children in a class significantly affected the class growth in mathematics.

In general, teacher personality characteristics were found to be more effective in producing change in the children's scores than were the teachers' I. Q., age, socio-economic level, marital status, family status (presence of children), years of formal education, years of teaching (excluding the gifted), years of teaching the gifted, credit hours in courses concerning the gifted, and present grade level taught. Nevertheless, the verbal I. Q. of the teacher was significantly related both to the convergent area of reading and to the divergent area of flexibility. Also the yearly income of the teacher (and husband if married) and the number of credit hours in courses concerning the gifted were significantly related to the convergent area of writing.

Four teacher personality traits were not found to be significantly related to the children's scores. Those four traits are: boorish vs. cultured, confident vs. insecure, conservatism vs. radicalism, phlegmatic vs. excitable.

On the other hand, 12 personality items correlated significantly with 28 measures of convergent and divergent production. No personality item, however, significantly related to all areas of convergent production. The two teacher personality items described as (1) happy-go-lucky, enthusiastic, expressive, alert and (2) naive, unpretentious, gregarious, spontaneous significantly related to the three convergent areas of science, social studies, and reading. Two other teacher personality items were significantly related both to social studies and to science. They were (1) submissive, mild, dependent, conventional and (2) lack of rigid internal standards, casual, relaxed, demanding. Science was also significantly influenced by the teacher personality items described as (1) unconventional, interested in art, imaginative, frivolous and (2) sociable, good natured, kind, adaptable. Reading was significantly related to the personality trait described as sensitive, subjective, demanding, artistically fastidious. The writing measure significantly related to the personality trait described as emotional immaturity, lacking in frustration tolerance, changeable, worrying.

The convergent area of listening was the only area where no personality trait proved significant. This test was read aloud to the children. Therefore they had to depend on their memory for the answers to the questions. Consequently it would appear that no personality trait studied produced a change in the memory ability of the children.

In the divergent measures there again was no one teacher personality characteristic significant in all four production areas. Fluency, originality, and elaboration were significantly influenced by the personality trait described as super-ego strength, conscientious, persistent, responsible. Fluency and originality were significantly related to the personality characteristic described as emotionally stable, ego strength, mature, placid. Flexibility and originality were influenced significantly by the teacher characteristic described as accepting, outgoing, understanding, permissive. Flexibility and elaboration were significantly related to the personality trait described as poor self-sentiment formation, uncontrolled, lax. The personality traits described as (1) self-sufficient, resourceful, (2) unconventional, interested in art, imaginative, frivolous, and (3) tough-minded, realistic, self-reliant, practical were significantly related to flexibility. Originality was significantly influenced by the personality trait described as shy, self-contained, conscientious, careful.

Although the personality traits described would seem to overlap, the correlations reported (4) among these factors are sufficiently low to indicate that they are discreet traits. In order to understand the fine distinctions among these personality factors, the reader is urged to examine their description in the test handbook (4).

The intercorrelations found among the measures of divergent thinking (3) titled fluency, flexibility, and originality range from .48 to .75, which indicate that there is a considerable amount of overlap in the skills being measured. On the other hand, the fourth measure of divergent thinking, elaboration, has a low correlation with the other measures of divergent thinking.

No intercorrelations were available for the convergent areas. Logically, however, the ability to read and understand would tend to influence all the convergent areas except mathematical computation.

Opposite personality traits were not found to be significantly related to measures within the convergent area or to measures within the divergent area. On the other hand, the opposites of four personality traits significantly influenced convergent and divergent measures.

The convergent area of mathematics was significantly influenced by the personality trait described as emotional immaturity, lacking in frustration tolerance, changeable, worrying, while the divergent areas of fluency and originality were significantly influenced by the opposite of this personality trait which is described as emotionally stable, ego strength, mature, placid. The convergent areas of science and social studies were significantly influenced by the personality trait described as lack of rigid internal standards, casual, relaxed, demanding, while the opposite of this described as super-ego strength, conscientious, persistent, responsible was significantly related to the divergent measures of fluency, originality and elaboration. The convergent area of writing was significantly influenced by the personality trait described as adventurous, active, responsive, impulsive, while the opposite of this trait described as shy, self-contained, conscientious, careful significantly influenced the divergent area of originality. Finally, the convergent area of reading was significantly related to the personality trait described as sensitive, subjective, demanding, artistically fastidious, while the opposite of this trait described as tough-minded, realistic, self-reliant, practical significantly influenced the divergent area of flexibility.

One personality trait significantly influenced a convergent and divergent measure. Flexibility and science were both affected by the personality trait described as unconventional, interested in art, imaginative, frivolous.

Those t values that approached a significant relationship between teacher personality traits and the divergent measures were: sociable and flexibility; emotional stability and flexibility, elaboration; timid and fluency, elaboration; sophisticated and flexibility; uncontrolled and fluency, originality.

Those t values that approached a significant relationship between teacher personality traits and the convergent measures were: sociable and reading; phlegmatic and mathematics.

Condensing the observations on the data of this project, in general the following personality traits of the teacher appear to have been most significant to growth in the divergent area: emotional stability, super-ego strength, accepting, and uncontrolled. Such a teacher would be emotionally mature (that is, not given to emotional outburst), energetic, persistent, friendly, and without a crystallized pattern for attaining social approval toward which one feels impelled to strive.

Continuing the condensation of observations, in general the following teacher personality traits appear to have been most significant to growth in the convergent area: submission, happy-go-lucky,

lack of rigid internal standards, and naive. Such a teacher would be submissive, dependent, cheerful, alert, not a staunch guardian of morals and manners, and would have a natural warmth and liking for people.

CONCLUSIONS AND IMPLICATIONS

There were two specific questions to be answered by this study. They were:

1. What effect does teacher intelligence, personality, and personal information (e. g. age, sex, training, experience, marital status, number of children) have on the quantity and quality of change exhibited by classes of gifted elementary students in the area of convergent production?
2. What effect does teacher intelligence, personality, and personal information have on the quantity and quality of change exhibited by classes of gifted elementary students in the area of divergent production?

In answer to those questions, the personality characteristics of teachers were found to be significantly related to the divergent and convergent growth of children in the fourth, fifth, and sixth grade classes for the gifted. Concerning the characteristics of the students themselves, girls did better in the divergent area of fluency than did boys, and the number of children in a class significantly affected the class growth in mathematics. Moreover, in general, the teachers' personality traits were found to be more effective in producing change in the children's scores than were the teachers I. Q., age, socio-economic level, marital status, family status (presence of children), years of formal education, years of teaching (excluding the gifted), and present grade level taught. Nevertheless, the verbal I. Q. of the teacher was significantly related both to the convergent area of reading and to the divergent areas of flexibility. Also the yearly income of the teacher (and husband if married) and the number of credit hours in courses concerning the gifted were significantly related to the convergent area of writing.

No single teacher personality trait was significantly related to all areas of convergent and divergent growth in the students. In general, however, there appeared to be a cluster of teacher personality traits most conducive to growth in the divergent area and another cluster most conducive to growth in the convergent area.

The following personality characteristics of the teacher appear to have been most significantly related to growth in the divergent area: emotional stability, super-ego strength, accepting, and uncontrolled. Such a teacher would be emotionally mature (that is, not given to emotional outburst), energetic, persistent, friendly, and without a crystallized pattern for attaining social approval toward which one feels impelled to strive.

The following teacher personality characteristics appear to have been most significantly related to growth in the convergent area: submission, happy-go-lucky, lack of rigid internal standards, and naive. Such a teacher would be submissive, dependent, cheerful, alert, not a staunch guardian of morals and manners, and would have a natural warmth and liking for people.

Because different teacher personality traits affect the convergent and the divergent areas, the possibility of having two teachers, one for each area, should be seriously considered. In this way a teacher could best utilize her personality attributes to further growth in the divergent or in the convergent area.

Another implication of this study is that gifted children should work with a teacher who is proficient in the divergent area and one who is proficient in the convergent area, because in that way a student not making as much progress in the divergent area, for example, would have the opportunity for optimal growth in that area as well as in the area in which he already demonstrates adequacy. Thus, grouping the children according to their needs rather than by their reading level or I. Q. alone, as is often the case, should be more fruitful.

Still another implications of this study concerns the fact that the teacher I. Q. seems not to be a primary factor in the change of the students. However, the I. Q. range of the teachers in this study was limited. Therefore, another study with a wider range of teacher I. Q. would seem essential before the effect of teacher intelligence is assumed to be of relatively little consequence.

Lastly, this study has implication for the selection of teachers for gifted classes. Certainly there is indication that teacher selection needs to be based primarily on an assessment of teacher personality traits and secondarily her personal background. To follow such a policy (rather than an administrative decision to rotate teachers among classes for the slow learners, normal, and gifted, or to select the "best" teacher) should also prove more fruitful to the consistent growth of the children.

SUMMARY

This study investigated the relationships between the teacher characteristics of intelligence, personality, and personal information (e. g. age, sex, training, experience, marital status, etc.) and change manifested by gifted elementary students in convergent and divergent thinking areas. The characteristics of the teachers were assessed by measures of intelligence, personality factors, and a personal information questionnaire. The growth of the gifted classes were assessed by six measures of convergent production and four measures of divergent production.

The tests measuring convergent and divergent production were administered by pre- and post-testing of the children. The pre-testing took place at the beginning of the 1964-1965 school year and post-testing at the conclusion of that academic year.

A series of multiple regression equations were calculated to assess the relationship between the changes in the 23 classes in the convergent and divergent production scores and the 34 teacher, class, and student variables. For each measure of change, all items that proved significant at the one percent level (Student's t of 2. 58 or higher) were grouped together for the development of a final regression analysis, leading to an influence profile for each change.

This study has shown that teacher characteristics do significantly influence the growth of fourth, fifth, and sixth grade self-contained classes with a mean I. Q. of 120 or better. However, there was no single teacher characteristic that was significantly related to all areas of convergent and divergent growth in the students.

Teacher personality characteristics were found to be more effective in producing change in the children's scores than were the other variables studied. In general, the teacher who appeared to have most significantly influenced growth in the divergent areas was emotionally mature (that is, not given to emotional outburst), energetic, persistent, friendly, and without a crystallized pattern for attaining social approval toward which one feels impelled to strive. In general, the teacher who appeared to have most significantly influenced growth in the convergent area was submissive, dependent, cheerful, alert, not a staunch guardian of morals and manners, and would have a natural warmth and liking for people.

Three items of teacher personal information did prove significant although not to the same degree as teacher personality traits. Verbal I. Q. was significantly related to growth in reading and in flexibility;

yearly income of the teacher and number of semester hours in course-work concerning the gifted both were significantly related to growth in writing.

Two class characteristics proved significant, although again not to the same degree as teacher personality traits. The number of students per class significantly affected growth in mathematics, and girls were more fluent than boys.

The implications of this study are: (1) gifted children should be exposed both to teachers whose personality traits were best suited to teach the divergent area and to those best suited to teach the convergent area; (2) the effect of teacher I. Q. cannot be fully evaluated until a broader range of I. Q. than existed in the project is studied; (3) teacher selection should be based primarily on personal information rather than on existing practices such as teacher rotation, etc.

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APPENDIX A

PERSONAL DATA QUESTIONNAIRE
(CONFIDENTIAL)

Directions: Fill in requested information or check appropriate blanks as completely as possible

1. Name _____
Last First Initial

2. Home Address _____
Street City

_____
County Tel. No.

3. School _____
Name Street

_____
City County Tel. No.

4. Date of Birth _____
Month Day Year

5. Sex Male _____ Female _____

6. Marital Status _____
Single Married Separated Divorced Widow Widower

7. Religion _____
Denomination

8. Occupation of Father _____
(Be specific)

9. Occupation of Mother _____
(Be specific)

10. Occupation of Spouse _____
(Be specific)

11. Number and Ages of Children Male ____ Female ____ Total ____

12. Total Family Income _____

Under $5,000	$5,000-10,000	$10,000-15,000	$15,000-20,000	$20,000 +

13. Education of Father _____
Years of formal schooling completed

14. Education of Mother _____
Years of formal schooling completed

15. Education of Spouse _____
Years of formal schooling completed

16. Educational Background

Name of Institution	Major	Credit Hours	Degree
Location	Minor		Date
Name of Institution	Major	Credit Hours	Degree
Location	Minor		Date

Name of Institution	Major	Credit Hours	Degree
Location	Minor		Date
Name of Institution	Major	Credit Hours	Degree
Location	Minor		Date

17. Teaching Experience

Grade Level	Year	Type Group (slow, average, fast, mixed)	Location
	1964-65	fast	

18. Other Work Experience

	Date

19. Type of Teaching Certificate Held _____

20. I requested this teaching assignment. _____ Yes _____ No

21. I taught this class last year in their previous grade. _____ Yes _____ No

22. Hobbies Currently Pursued _____

_____

_____

23. Current Professional Membership _____

_____

_____

_____

24. Professional Journals Regularly Read _____

_____

_____

_____

_____

25. Magazines Currently Read _____

_____

_____

_____

26. Books Read Concerning the Gifted _____

_____

_____

27. Courses Taken Concerning the Gifted

Name	Content	Credit Hours
Instructor	Institution	Date
Name	Content	Credit Hours
Instructor	Institution	Date
Name	Content	Credit Hours
Instructor	Institution	Date

28. Utilizing your experience with children, please give your definition of giftedness. _____

_____

_____

_____

29. In not more than 250 words, please discuss the type of classroom activities you believe are the most stimulating and vital for gifted children. Since educational terms tend to be ambiguous, please be specific by giving examples when possible.

APPENDIX B

The Relationship Between the Changes in Class Scores and All the Variables Investigated

The variables are expressed as:

1 = *
2 = aloof vs. sociable
3 = boorish vs. cultured
4 = emotional immaturity vs. emotional stability
5 = submission vs. dominance
6 = serious vs. happy-go-lucky
7 = lack of rigid internal standards vs. super-ego strength
8 = timid vs. adventurous
9 = tough-minded vs. sensitive
10 = accepting vs. suspecting
11 = conventional vs. unconventional
12 = naive vs. sophisticated
13 = confident vs. insecure
14 = conservatism vs. radicalism
15 = group dependency vs. self-sufficiency
16 = uncontrolled vs. controlled
17 = phlegmatic vs. excitable
18 = verbal I. Q.
19 = non-verbal I. Q.
20 = age
21 = socio-economic level judged by father's occupation
22 = yearly income of teacher (and husband if married)
23 = marital status
24 = teacher is childless or has children
25 = years of formal education
26 = years of teaching (excluding the gifted)
27 = years of teaching the gifted
28 = credit hours in courses concerning gifted
29 = grade presently teaching (4, 5, or 6)
30 = number of students in the class
31 = rural or urban location
32 = sex
33 = age (in months)
34 = verbal I. Q.
35 = non-verbal I. Q.

The actual numbers are determined by their exponents in the following fashion:

0. 617090909	01	=	6. 17090909
0. 617090909	02	=	61. 7090909
0. 617090909	-01	=	0. 0617090909
0. 617090909	-02	=	0. 00617090909

* 1 = the intercept

REGRESSION OF TEACHER PERSONALITY ITEMS WITH DELTA FLUENCY

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(3)	0.575247524E 01	0.167619857E 01
X(4)	0.600000000E 01	0.160850912E 01
X(5)	0.501386138E 01	0.195022539E 01
X(6)	0.466930693E 01	0.149587677E 01
X(7)	0.682178217E 01	0.143507679E 01
X(8)	0.605346534E 01	0.184496119E 01
X(9)	0.676633663E 01	0.198227849E 01
X(10)	0.389108910E 01	0.163482069E 01
X(11)	0.541386138E 01	0.117725044E 01
X(12)	0.591089108E 01	0.180111853E 01
X(13)	0.488118811E 01	0.160163067E 01
X(14)	0.552673267E 01	0.143225949E 01
X(15)	0.534257425E 01	0.147447505E 01
X(16)	0.722772277E 01	0.179218535E 01
X(17)	0.488712871E 01	0.166342919E 01
Y	0.106693069E 02	0.150614992E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.145898308E 02

B 1=	-0.177039000E 01	T= -0.934801572E-01
B 2=	0.133071864E 01	T= 0.211702888E 01
B 3=	0.118287400E 00	T= 0.166691146E 00
B 4=	0.372745790E 01	T= 0.346594674E 01
B 5=	0.803486000E-01	T= 0.111977907E 00
B 6=	-0.127517069E 01	T= -0.158541348E 01
B 7=	0.518045950E 01	T= 0.403448912E 01
B 8=	-0.319842571E 01	T= -0.393779926E 01
B 9=	-0.140894970E 01	T= -0.210510989E 01
B10=	-0.254741380E 01	T= -0.252510515E 01
B11=	0.162534560E 01	T= 0.135078752E 01
B12=	0.433798600E 00	T= 0.615224378E 00
B13=	-0.154451090E 01	T= -0.143025761E 01
B14=	-0.271418000E 00	T= -0.316639389E 00
B15=	0.213203020E 01	T= 0.162780511E 01
B16=	-0.380160760E 01	T= -0.424277659E 01
B17=	0.782520400E 00	T= 0.885270569E 00

REGRESSION OF TEACHER PERSONALITY ITEMS WITH DELTA FLEXIBILITY

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(3)	0.575247524E 01	0.167619857E 01
X(4)	0.600000000E 01	0.160850914E 01
X(5)	0.501386138E 01	0.195022935E 01
X(6)	0.466930693E 01	0.149587677E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(9)	0.676633663E 01	0.198227649E 01
X(10)	0.389108910E 01	0.163482069E 01
X(11)	0.541386138E 01	0.117725044E 01
X(12)	0.591089108E 01	0.180111853E 01
X(13)	0.488118811E 01	0.160163067E 01
X(14)	0.552673267E 01	0.143225949E 01
X(15)	0.534257425E 01	0.147447305E 01
X(16)	0.722772277E 01	0.179218535E 01
X(17)	0.488712871E 01	0.166342919E 01
Y	0.348910891E 01	0.786621644E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.759900243E 01

B 1=	-0.263713210E 02	T=	-0.267347342E 01
B 2=	0.108106202E 01	T=	0.330209767E 01
B 3=	-0.653890480E 00	T=	-0.176918221E 01
B 4=	0.212025820E 01	T=	0.378522229E 01
B 5=	0.308173000E-01	T=	0.824597702E-01
B 6=	-0.889302320E 00	T=	-0.212283945E 01
B 7=	0.258109580E 01	T=	0.385938310E 01
B 8=	-0.276979322E 00	T=	-0.654723839E 00
B 9=	-0.133533380E 01	T=	-0.383056314E 01
B10=	-0.197613110E 01	T=	-0.376087778E 01
B11=	0.233119000E 01	T=	0.371973942E 01
B12=	0.986139120E 00	T=	0.268520271E 01
B13=	-0.608405700E 00	T=	-0.108170805E 01
B14=	-0.367494720E 00	T=	-0.823134676E 00
B15=	0.334445350E 01	T=	0.490261417E 01
B16=	-0.230908223E 01	T=	-0.494779802E 01
B17=	0.875827500E 00	T=	0.190239881E 01

REGRESSION OF TEACHER PERSONALITY ITEMS WITH DELTA ORIGINALITY

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(3)	0.575247524E 01	0.167619857E 01
X(4)	0.600000000E 01	0.160850912E 01
X(5)	0.501386138E 01	0.195022935E 01
X(6)	0.466930693E 01	0.199587677E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(9)	0.676633663E 01	0.198227649E 01
X(10)	0.389108910E 01	0.163482069E 01
X(11)	0.541386138E 01	0.117725044E 01
X(12)	0.591089108E 01	0.180111853E 01
X(13)	0.488118811E 01	0.160163067E 01
X(14)	0.552673267E 01	0.143225949E 01
X(15)	0.534257425E 01	0.147447305E 01
X(16)	0.722772277E 01	0.179218935E 01
X(17)	0.488712871E 01	0.166342919E 01
Y	0.684356435E 01	0.197758813E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.143101917E 02

B 1=	-0.251407540E 02	T= -0.135342784E 01
B 2=	0.249736190E 01	T= 0.405068383E 01
B 3=	-0.929334000E-01	T= -0.133521805E 00
B 4=	0.347203080E 01	T= 0.329153918E 01
B 5=	0.886787900E 00	T= 0.126002776E 01
B 6=	-0.103359794E 01	T= -0.131018316E 01
B 7=	0.404971720E 01	T= 0.321552052E 01
B 8=	-0.275074737E 01	T= -0.345282313E 01
B 9=	-0.651956900E 00	T= -0.993126317E 00
B10=	-0.268088760E 01	T= -0.270934864E 01
B11=	0.262754640E 01	T= 0.222637356E 01
B12=	0.453582700E 00	T= 0.655855542E 00
B13=	-0.154969670E 01	T= -0.146310778E 01
B14=	-0.117370327E 01	T= -0.139601771E 01
B15=	0.259744400E 01	T= 0.202190884E 01
B16=	-0.283773010E 01	T= -0.322894230E 01
B17=	0.826929200E 00	T= 0.953794924E 00

REGRESSION OF TEACHER PERSONALITY ITEMS WITH DELTA ELABORATION

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(3)	0.579247524E 01	0.167619857E 01
X(4)	0.600000000E 01	0.160850912E 01
X(5)	0.501386138E 01	0.195022539E 01
X(6)	0.466930693E 01	0.149587677E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(9)	0.676633663E 01	0.198227649E 01
X(10)	0.389108910E 01	0.163482069E 01
X(11)	0.541386138E 01	0.117725049E 01
X(12)	0.591089108E 01	0.180111853E 01
X(13)	0.488118811E 01	0.160163067E 01
X(14)	0.552673267E 01	0.143225949E 01
X(15)	0.534257425E 01	0.147447509E 01
X(16)	0.722772277E 01	0.179418535E 01
X(17)	0.488712871E 01	0.166342919E 01
Y	0.128653465E 02	0.315107327E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.307606903E 02

B 1=	-0.423736400E 02	T= -0.106120781E 01
B 2=	0.194507510E 01	T= 0.146767905E 01
B 3=	-0.130150510E 01	T= -0.869909596E 00
B 4=	0.812557450E 01	T= 0.358358238E 01
B 5=	0.178097700E 00	T= 0.117724410E 00
B 6=	-0.276563820E 01	T= -0.163088602E 01
B 7=	0.770558550E 01	T= 0.284629617E 01
B 8=	-0.443186981E 01	T= -0.258796547E 01
B 9=	-0.339094660E 01	T= -0.240300394E 01
B10=	-0.351694260E 01	T= -0.165348182E 01
B11=	0.322506410E 01	T= 0.127129894E 01
B12=	0.214822130E 01	T= 0.144503573E 01
B13=	0.281033240E 01	T= 0.123434100E 01
B14=	0.103273270E 01	T= 0.571437059E 00
B15=	0.536900090E 01	T= 0.201669638E 01
B16=	-0.653302710E 01	T= -0.345821122E 01
B17=	-0.152212900E 01	T= -0.816740084E 00

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA FLUENCY

	AVERAGE	STANDARD DEVIATION
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850099405E 02	0.181297878E 02
X(20)	0.412237623E 02	0.115363224E 02
X(21)	0.206930693E 01	0.992605854E 00
X(22)	0.268118811E 01	0.969445193E 00
X(23)	0.956435643E 00	0.204326148E 00
X(24)	0.586138613E 00	0.493012625E 00
X(25)	0.165366336E 02	0.380045628E 00
X(26)	0.997821782E 01	0.659526650E 01
X(27)	0.228118811E 01	0.201781317E 01
X(28)	0.475247524E 00	0.791748860E 00
X(29)	0.510891089E 01	0.842561210E 00
X(30)	0.257722772E 02	0.381642541E 01
X(31)	0.667326732E 00	0.471637831E 00
Y	0.106693069E 02	0.150614992E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.145989221E 02

B 1=	0.197818630E 03	T= 0.248033014E 01
B18=	0.620020590E 00	T= 0.381980596E 01
B19=	-0.254946018E 00	T= -0.312595704E 01
B20=	-0.283756720E 00	T= -0.196351609E 01
B21=	0.501614800E 00	T= 0.402998746E 00
B22=	0.182998390E 01	T= 0.109099061E 01
B23=	0.330459670E 01	T= 0.806770625E 00
B24=	-0.389242550E 01	T= -0.125681120E 01
B25=	-0.127517550E 02	T= -0.238648495E 01
B26=	-0.672011000E-02	T= -0.302048096E-01
B27=	0.222433480E 01	T= 0.221311860E 01
B28=	0.894229240E 01	T= 0.287740902E 01
B29=	-0.984222860E 00	T= -0.803022345E 00
B30=	-0.560542710E 00	T= -0.206455507E 01
B31=	-0.438376000E 01	T= -0.145565429E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA FLEXIBILITY

	AVERAGE	STANDARD DEVIATION
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850059405E 02	0.181297676E 02
X(20)	0.412237623E 02	0.115363224E 02
X(21)	0.206930693E 01	0.992605854E 00
X(22)	0.268118811E 01	0.969445193E 00
X(23)	0.956435643E 00	0.204326148E 00
X(24)	0.586138613E 00	0.493012629E 00
X(25)	0.165366336E 02	0.980045628E 00
X(26)	0.997821782E 01	0.629526650E 01
X(27)	0.228118811E 01	0.201781317E 01
X(28)	0.475247524E 00	0.791748860E 00
X(29)	0.510891089E 01	0.842561210E 00
X(30)	0.257722772E 02	0.381642541E 01
X(31)	0.667326732E 00	0.471637831E 00
Y	0.348910891E 01	0.780621849E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.766164685E 01

B 1=	0.996329900E 02	T= 0.238036812E 01
B18=	0.329835821E 00	T= 0.387196719E 01
B19=	-0.113101102E 00	T= -0.264241040E 01
B20=	-0.120214101E 00	T= -0.158504835E 01
B21=	-0.493278700E 00	T= -0.755134612E 00
B22=	-0.189823400E 00	T= -0.215636439E 00
B23=	0.503427500E 00	T= 0.234189386E 00
B24=	-0.610095220E 00	T= -0.375358295E 00
B25=	-0.639304200E 01	T= -0.227979060E 01
B26=	0.587166900E-01	T= 0.502874885E 00
B27=	0.767479950E 00	T= 0.145502424E 01
B28=	0.442699070E 01	T= 0.271431406E 01
B29=	-0.124829238E 01	T= -0.194065808E 01
B30=	-0.293022690E 00	T= -0.205644774E 01
B31=	0.195605300E 01	T= 0.123762980E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA ORIGINALITY

	AVERAGE	STANDARD DEVIATION
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850099405E 02	0.181297676E 02
X(20)	0.412237623E 02	0.115363224E 02
X(21)	0.206930693E 01	0.992605854E 00
X(22)	0.268118811E 01	0.969445193E 00
X(23)	0.956435643E 00	0.204326148E 00
X(24)	0.986138613E 00	0.493012622E 00
X(25)	0.165366336E 02	0.580045628E 00
X(26)	0.997821782E 01	0.659526650E 01
X(27)	0.228118811E 01	0.201781317E 01
X(28)	0.475247524E 00	0.791748860E 00
X(29)	0.510891089E 01	0.842561210E 00
X(30)	0.257722772E 02	0.381642941E 01
X(31)	0.667326732E 00	0.471637831E 00
Y	0.684356435E 01	0.147758813E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.142984145E 02

B 1=	0.252652510E 03	T=	0.323443796E 01
B18=	0.663169120E 00	T=	0.417150140E 01
B19=	-0.186013963E 00	T=	-0.232869830E 01
B20=	-0.185500480E 00	T=	-0.131058861E 01
B21=	0.553076700E 00	T=	0.454174291E 00
B22=	0.691918300E 00	T=	0.421173919E 00
B23=	0.556030000E 00	T=	0.138599844E 00
B24=	-0.520424787E 01	T=	-0.171569710E 01
B25=	-0.174146076E 02	T=	-0.332763238E 01
B26=	0.237522380E 00	T=	0.109002677E 01
B27=	0.230987520E 01	T=	0.234652914E 01
B28=	0.100577604E 02	T=	0.330439743E 01
B29=	-0.713747340E 00	T=	-0.594581772E 00
B30=	-0.341648600E 00	T=	-0.128478459E 01
B31=	-0.396739760E 01	T=	-0.134508618E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA ELABORATION

	AVERAGE	STANDARD DEVIATION
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850059405E 02	0.181297670E 02
X(20)	0.412237623E 02	0.115363224E 02
X(21)	0.206930693E 01	0.992605854E 00
X(22)	0.268118811E 01	0.969445193E 00
X(23)	0.956435643E 00	0.204326148E 00
X(24)	0.386138613E 00	0.493012625E 00
X(25)	0.165366336E 02	0.580045628E 00
X(26)	0.997821782E 01	0.659526650E 01
X(27)	0.228118811E 01	0.201781317E 01
X(28)	0.475247524E 00	0.791748860E 00
X(29)	0.510891089E 01	0.842561210E 00
X(30)	0.257722772E 02	0.381642541E 01
X(31)	0.667326732E 00	0.471637831E 00
Y	0.128693465E 02	0.315107327E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.305859035E 02

B 1=	0.260880780E 03	T= 0.156129101E 01
B18=	0.651171850E 00	T= 0.191483026E 01
B19=	-0.679117560E-01	T= -0.397446989E 00
B20=	-0.591069060E 00	T= -0.195220826E 01
B21=	0.118914220E 01	T= 0.454084511E 00
B22=	0.341347720E 01	T= 0.971337601E 00
B23=	0.343436200E 00	T= 0.400200069E-01
B24=	-0.281478400E 00	T= -0.433804733E-01
B25=	-0.125438820E 02	T= -0.112052146E 01
B26=	-0.707516000E 00	T= -0.151787309E 01
B27=	0.265142510E 01	T= 0.125916710E 01
B28=	0.796057330E 01	T= 0.122263450E 01
B29=	-0.791934212E 01	T= -0.308405980E 01
B30=	-0.158087984E 01	T= -0.277917633E 01
B31=	-0.155518830E 02	T= -0.246486932E 01

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA FLUENCY

	AVERAGE	STANDARD DEVIATION
X(32)	0.9247524 75E 00	0.499882116E 00
X(33)	0.126441584E 03	0.102502937E 02
X(34)	0.124578217E 03	0.712100184E 01
X(35)	0.121990099E 03	0.986779041E 01
Y	0.106693069E 02	0.150614992E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.14864343HE 02

B 1= -0.154027800E 02	T= -0.922259364E 00
B32= 0.507718490E 01	T= 0.382243634E 01
B33= 0.649947640E-01	T= 0.987075418E 00
B34= 0.116444010E 00	T= 0.118215384E 01
B35= 0.580180000E-02	T= 0.781752382E-01

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA FLEXIBILITY

	AVERAGE	STANDARD DEVIATION
X(32)	0.9247524 75E 00	0.499882116E 00
X(33)	0.126441584E 03	0.102502937E 02
X(34)	0.124578217E 03	0.712100184E 01
X(35)	0.121990099E 03	0.986779041E 01
Y	0.348910891E 01	0.786621644E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.782598786E 01

B 1= 0.127560400E 02	T= 0.145069597E 01
B32= 0.196812907E 01	T= 0.281434581E 01
B33= -0.179045830E-01	T= -0.516467202E 00
B34= -0.284474100E-01	T= -0.548537283E 00
B35= -0.368218800E-01	T= -0.976009723E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA ORIGINALITY

	AVERAGE	STANDARD DEVIATION
X(32)	0.5247524755E 00	0.4998821166E 00
X(33)	0.1264415845E 03	0.1025029375E 02
X(34)	0.1245782175E 03	0.7121001845E 01
X(35)	0.1219900995E 03	0.9867790415E 01
Y	0.6843564355E 01	0.1477588135E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.1474323495E 02

B 1=	0.2718247005E 01	T= 0.1640931845E 00
B32=	0.3143236205E 01	T= 0.2385872035E 01
B33=	0.1516195405E-01	T= 0.2321497745E 00
B34=	-0.3534817005E-01	T= -0.3615068115E 00
B35=	0.4067910005E-01	T= 0.5723555815E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA ELABORATION

	AVERAGE	STANDARD DEVIATION
X(32)	0.5247524755E 00	0.4998821165E 00
X(33)	0.1264415845E 03	0.1025029375E 02
X(34)	0.1245782175E 03	0.7121001845E 01
X(35)	0.1219900995E 03	0.9867790415E 01
Y	0.1286534655E 02	0.3151073275E 02

STD DEV= 0.3156605625E 02

B 1=	0.3642924005E 02	T= 0.1027139845E 01
B32=	0.2303243505E 01	T= 0.8165495855E 00
B33=	-0.8801580605E-01	T= -0.6294453865E 00
B34=	-0.2200806805E 00	T= -0.1052117355E 01
B35=	0.1129072005E 00	T= 0.7419739705E 00

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA MATH

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.149904313E 01
X(7)	0.685454545E 01	0.149215534E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665529E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727272E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.420181818E 01	0.623822725E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.597357467E 01

B 1=	0.102989890E 02	T=	0.204024714E 01
B 2=	0.182379780E 00	T=	0.739124165E 00
B 3=	-0.125248730E 00	T=	-0.457076928E 00
B 4=	-0.112970795E 01	T=	-0.368256689E 01
B 5=	-0.541822700E 00	T=	-0.250864583E 01
B 6=	0.188620200E-01	T=	0.628548605E-01
B 7=	-0.172678370E 00	T=	-0.615408414E 00
B 8=	0.946843400E-01	T=	0.319155202E 00
B 9=	-0.125451530E 00	T=	-0.607154870E 00
B10=	0.160882580E 00	T=	0.599749278E 00
B11=	0.337029010E 00	T=	0.125035182E 01
B12=	0.466852120E 00	T=	0.254405375E 01
B13=	0.870727300E 00	T=	0.239171646E 01
B14=	-0.292884340E 00	T=	-0.116726115E 01
B15=	0.398031560E 00	T=	0.115109934E 01
B16=	0.324901980E 00	T=	0.103718834E 01
B17=	-0.160243210E 01	T=	-0.529785864E 01

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA SCIENCE

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.199904313E 01
X(7)	0.685454545E 01	0.149215539E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665526E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727272E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.553636363E 01	0.131721061E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.118338752E 02

B 1=	0.299600570E 02	T= 0.299597406E 01
B 2=	0.143710510E 01	T= 0.293992706E 01
B 3=	0.796759360E 00	T= 0.146774497E 01
B 4=	0.106315000E-01	T= 0.174938809E-01
B 5=	-0.181753958E 01	T= -0.424789081E 01
B 6=	0.231256910E 01	T= 0.389002771E 01
B 7=	-0.258633000E 01	T= -0.465282520E 01
B 8=	-0.101920129E 01	T= -0.173416752E 01
B 9=	-0.310459300E-01	T= -0.758464932E-01
B10=	-0.832492490E 00	T= -0.156851403E 01
B11=	0.188509620E 01	T= 0.353017705E 01
B12=	-0.199007125E 01	T= -0.547422803E 01
B13=	0.422119300E 00	T= 0.585288582E 00
B14=	-0.752953120E 00	T= -0.151477152E 01
B15=	-0.109380747E 01	T= -0.159677415E 01
B16=	-0.134612580E 00	T= -0.217320645E 00
B17=	-0.262861100E 00	T= -0.438686594E 00

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA
SOCIAL STUDIES

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731509E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.149904313E 01
X(7)	0.685454545E 01	0.149215537E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665526E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727272E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.541272727E 01	0.127039741E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.784223718E 01

B 1=	0.218572780E 02	T= 0.329821212E 01
B 2=	0.756267900E 00	T= 0.233459094E 01
B 3=	0.203632790E 00	T= 0.566054183E 00
B 4=	-0.210636520E 00	T= -0.523012964E 00
B 5=	-0.128388666E 01	T= -0.452796609E 01
B 6=	0.137479590E 01	T= 0.348969980E 01
B 7=	-0.111222070E 01	T= -0.301933141E 01
B 8=	0.279009760E 00	T= 0.716370166E 00
B 9=	0.380856780E 00	T= 0.140404017E 01
B10=	-0.319047960E 00	T= -0.907091787E 00
B11=	-0.267831800E 00	T= -0.756870209E 00
B12=	-0.131328255E 01	T= -0.545129199E 01
B13=	-0.317249700E 00	T= -0.663778337E 00
B14=	-0.184195800E-01	T= -0.559172601E-01
B15=	0.244534070E 00	T= 0.538677701E 00
B16=	-0.875138960E 00	T= -0.213196125E 01
B17=	-0.469776000E-01	T= -0.118305737E 00

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA READING

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.199904313E 01
X(7)	0.685454545E 01	0.149215534E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665528E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.599818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727274E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.616545454E 01	0.125250891E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.115422143E 02

B 1=	0.135695580E 02	T= 0.139123036E 01
B 2=	0.170728130E 01	T= 0.358088984E 01
B 3=	-0.206892630E 00	T= -0.390756447E 00
B 4=	-0.251217990E 00	T= -0.423818938E 00
B 5=	-0.116506399E 01	T= -0.279175308E 01
B 6=	0.242964150E 01	T= 0.419023158E 01
B 7=	-0.138538510E 01	T= -0.255529509E 01
B 8=	-0.398591540E 00	T= -0.695339677E 00
B 9=	0.115247949E 01	T= 0.288670157E 01
B10=	-0.284722460E 00	T= -0.550006508E 00
B11=	0.108258050E 01	T= 0.207859707E 01
B12=	-0.228210990E 01	T= -0.643618716E 01
B13=	0.130060100E 00	T= 0.184891428E 00
B14=	-0.769195460E 00	T= -0.158654998E 01
B15=	-0.746669350E 00	T= -0.111755469E 01
B16=	-0.105187930E 00	T= -0.174108199E 00
B17=	0.184643500E 00	T= 0.315936583E 00

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA LISTENING

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.149904313E 01
X(7)	0.685454545E 01	0.149215534E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665526E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727272E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.380727272E 01	0.906077144E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.897277243E 01

B 1=	0.934657200E 01	T=	0.123267385E 01
B 2=	-0.264324630E 00	T=	-0.713158380E 00
B 3=	0.591201490E 00	T=	0.143634620E 01
B 4=	-0.582483120E 00	T=	-0.126408258E 01
B 5=	-0.673732500E-01	T=	-0.207671690E 00
B 6=	0.753633910E 00	T=	0.167193250E 01
B 7=	0.385287900E-01	T=	0.914152185E-01
B 8=	-0.130574470E 00	T=	-0.293014887E 00
B 9=	0.676689970E 00	T=	0.218032333E 01
B10=	0.799742310E 00	T=	0.198727813E 01
B11=	-0.124223830E 00	T=	-0.306815698E 00
B12=	-0.488920740E 00	T=	-0.177375262E 01
B13=	-0.161928500E 00	T=	-0.296113677E 00
B14=	-0.541512190E 00	T=	-0.143677109E 01
B15=	-0.703659790E 00	T=	-0.135476262E 01
B16=	-0.841619200E-01	T=	-0.179197235E 00
B17=	-0.457820200E 00	T=	-0.100768159E 01

REGRESSION OF TEACHER PERSONALITY CHARACTERISTICS WITH DELTA WRITING

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(3)	0.573636363E 01	0.161322670E 01
X(4)	0.610000000E 01	0.167674548E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.149904313E 01
X(7)	0.685454545E 01	0.149215534E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665526E 01
X(10)	0.376363636E 01	0.167879343E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(13)	0.467272727E 01	0.173944430E 01
X(14)	0.545636363E 01	0.145638017E 01
X(15)	0.547818181E 01	0.148412251E 01
X(16)	0.712727272E 01	0.174988467E 01
X(17)	0.480545454E 01	0.164199423E 01
Y	0.514909090E 01	0.996604202E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.905780114E 01

B 1=	0.105[illegible]120E 02	T=	0.138279636E 01
B 2=	-0.4[illegible]234250E 00	T=	-0.118196496E 01
B 3=	-0.538266090E 00	T=	-0.129546148E 01
B 4=	-0.208574840E 01	T=	-0.448392039E 01
B 5=	0.521683820E 00	T=	0.159294594E 01
B 6=	-0.910936480E 00	T=	-0.200193639E 01
B 7=	0.471204600E 00	T=	0.110750711E 01
B 8=	0.179311260E 01	T=	0.398605097E 01
B 9=	0.154060566E 01	T=	0.491729794E 01
B10=	0.163905757E 01	T=	0.403465738E 01
B11=	-0.993212290E 00	T=	-0.243006807E 01
B12=	0.357162980E 00	T=	0.128358578E 01
B13=	-0.136218680E 01	T=	-0.246760540E 01
B14=	-0.489112780E 00	T=	-0.128556016E 01
B15=	-0.395644020E 00	T=	-0.754590648E 00
B16=	0.332533960E 00	T=	0.701383501E 00
B17=	-0.841632900E 00	T=	-0.183507977E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA MATH

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344556E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327564E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.498993853E 00
X(25)	0.165381818E 02	0.573707751E 00
X(26)	0.964363636E 01	0.842430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185209E 00
X(30)	0.255636363E 02	0.376622724E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.420181818E 01	0.623822725E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.599230870E 01

B 1=	0.383722830E 02	T=	0.139383439E 01
B18=	-0.682330240E-01	T=	-0.132236130E 01
B19=	-0.167314110E-01	T=	-0.581892915E 00
B20=	-0.137975470E-01	T=	-0.255111890E 00
B21=	-0.145398060E 01	T=	-0.296933778E 01
B22=	-0.988322900E 00	T=	-0.155784904E 01
B23=	0.272265266E 01	T=	0.189053413E 01
B24=	-0.282713110E 00	T=	-0.228445618E 00
B25=	-0.425323600E 00	T=	-0.230136393E 00
B26=	-0.154421800E-01	T=	-0.173888948E 00
B27=	0.103089890E 00	T=	0.441532425E 00
B28=	0.967027000E-01	T=	0.870258681E-01
B29=	-0.180462728E 01	T=	-0.364742085E 01
B30=	-0.289630350E 00	T=	-0.306193373E 01
B31=	0.236748210E 01	T=	0.204144896E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA SCIENCE

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344556E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327564E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.498993853E 00
X(25)	0.165381818E 02	0.373707751E 00
X(26)	0.964363636E 01	0.642430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622729E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.553636363E 01	0.131721661E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.120781435E 02

B 1=	0.174397370E 02	T=	0.314287755E 00
B18=	0.166516746E 00	T=	0.160109933E 01
B19=	0.121256969E 00	T=	0.209223856E 01
B20=	0.401687908E 00	T=	0.368478009E 01
B21=	0.430165500E 00	T=	0.435843488E 00
B22=	-0.269407900E 01	T=	-0.210683650E 01
B23=	0.257356721E 01	T=	0.886587880E 00
B24=	-0.393620850E 00	T=	-0.157800717E 00
B25=	-0.415946870E 01	T=	-0.111660013E 01
B26=	-0.217271860E 00	T=	-0.121383833E 01
B27=	0.147429760E 01	T=	0.198022580E 01
B28=	-0.190174340E 01	T=	-0.849093805E 00
B29=	0.232001155E 01	T=	0.232638987E 01
B30=	0.220981740E 00	T=	0.115904981E 01
B31=	-0.349986400E 00	T=	-0.149725917E 00

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA SOCIAL STUDIES

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344556E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327564E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.498993853E 00
X(25)	0.165381818E 02	0.573707751E 00
X(26)	0.964363636E 01	0.642430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.541272727E 01	0.827039741E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.802247806E 01

B 1=	0.617106220E 02	T=	0.167432245E 01
B18=	0.155702750E 00	T=	0.225391449E 01
B19=	0.773309600E-02	T=	0.200885941E 00
B20=	-0.204777450E-01	T=	-0.282811191E 00
B21=	0.626274600E 00	T=	0.955325634E 00
B22=	0.292103800E 00	T=	0.343913608E 00
B23=	-0.124067320E 01	T=	-0.643480402E 00
B24=	0.133805835E 01	T=	0.807602356E 00
B25=	-0.502893820E 01	T=	-0.203248692E 01
B26=	-0.138909900E-01	T=	-0.116837487E 00
B27=	0.932795800E 00	T=	0.188628706E 01
B28=	0.149531720E 01	T=	0.100514503E 01
B29=	0.234721430E 00	T=	0.354353512E 00
B30=	0.216531040E 00	T=	0.170984806E 01
B31=	0.262657900E 00	T=	0.169171784E 00

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA READING

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344956E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327564E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.498993853E 00
X(25)	0.165381818E 02	0.573707751E 00
X(26)	0.964363636E 01	0.842430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.616545454E 01	0.125250891E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.114729127E 02

B 1=	0.936704320E 02	T=	0.177711917E 01
B18=	0.359898351E 00	T=	0.364297222E 01
B19=	0.224443540E-01	T=	0.407697549E 00
B20=	0.113249157E 00	T=	0.109366493E 01
B21=	0.799813000E-01	T=	0.853119692E-01
B22=	-0.144257500E 01	T=	-0.118764101E 01
B23=	-0.136179809E 01	T=	-0.493884609E 00
B24=	-0.304568514E 01	T=	-0.128541208E 01
B25=	-0.894008020E 01	T=	-0.252654900E 01
B26=	0.141931250E 00	T=	0.834760494E 00
B27=	0.218553650E 01	T=	0.309039588E 01
B28=	0.159428830E 01	T=	0.749371393E 00
B29=	0.561803770E 00	T=	0.593066643E 00
B30=	0.601906830E 00	T=	0.332354436E 01
B31=	-0.183464780E 01	T=	-0.826279767E 00

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA LISTENING

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344556E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327564E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.798993853E 00
X(25)	0.165381818E 02	0.573707751E 00
X(26)	0.964363636E 01	0.642430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.380727272E 01	0.905077144E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.895568703E 01

B 1=	0.110976273E 03	T= 0.269723597E 01
B18=	0.120571577E 00	T= 0.156349222E 01
B19=	0.266957480E-01	T= 0.621223486E 00
B20=	-0.128582670E 00	T= -0.159078684E 01
B21=	0.180064890E 01	T= 0.246051095E 01
B22=	0.248240550E 01	T= 0.261814990E 01
B23=	-0.384459218E 01	T= -0.178623186E 01
B24=	0.399492414E 01	T= 0.194366711E 01
B25=	-0.692549650E 01	T= -0.250733293E 01
B26=	-0.399355850E 00	T= -0.300897579E 01
B27=	0.155040321E 01	T= 0.280850688E 01
B28=	0.275536020E 01	T= 0.165914195E 01
B29=	-0.675970360E 00	T= -0.914158090E 00
B30=	-0.168515109E 00	T= -0.119202629E 01
B31=	-0.554509880E 01	T= -0.319931042E 01

REGRESSION OF CLASS CHARACTERISTICS WITH DELTA WRITING

	AVERAGE	STANDARD DEVIATION
X(18)	0.101674545E 03	0.119344556E 02
X(19)	0.847690909E 02	0.177489931E 02
X(20)	0.406327272E 02	0.113024177E 02
X(21)	0.214545454E 01	0.984731927E 00
X(22)	0.267090909E 01	0.940327569E 00
X(23)	0.914545454E 00	0.279811400E 00
X(24)	0.538181818E 00	0.798993853E 00
X(25)	0.165381818E 02	0.573707751E 00
X(26)	0.964363636E 01	0.642430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.514909090E 01	0.996604202E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.902480072E 01

B 1= 0.123375763E 03	T= 0.297563697E 01
B18= -0.150576924E 00	T= -0.193762840E 01
B19= -0.602420550E-01	T= -0.139112718E 01
B20= -0.378280460E 00	T= -0.464407505E 01
B21= 0.761868300E 00	T= 0.103308832E 01
B22= 0.251490610E 01	T= 0.263211491E 01
B23= 0.264325031E 01	T= 0.121867283E 01
B24= 0.481009004E 01	T= 0.258075422E 01
B25= -0.469415780E 01	T= -0.168647500E 01
B26= 0.133991750E 00	T= 0.100183912E 01
B27= 0.193689720E 00	T= 0.348175888E 00
B28= 0.514949790E 01	T= 0.307702629E 01
B29= -0.225063233E 01	T= -0.302036528E 01
B30= -0.389748[illegible]E 00	T= -0.273589189E 01
B31= -0.116[illegible]8870E 01	T= -0.666479799E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA MATH

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.420181818E 01	0.629822725E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.617345553E 01

B 1=	0.139202490E 02	T=	0.233232411E 01
B32=	0.219920541E 00	T=	0.417511404E 00
B33=	-0.991409790E-01	T=	-0.378564804E 01
B34=	0.162104000E-01	T=	0.447730097E 00
B35=	0.582976000E-02	T=	0.217690194E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA SCIENCE

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.553636363E 01	0.131721861E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.131697779E 02

B 1=	0.230176510E 02	T=	0.180792708E 01
B32=	-0.893927757E 00	T=	-0.795578402E 00
B33=	0.896935560E-02	T=	0.160559912E 00
B34=	-0.964906000E-01	T=	-0.124935418E 01
B35=	-0.494632700E-01	T=	-0.865862690E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA SOCIAL STUDIES

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.541272727E 01	0.827039741E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.821638571E 01

B 1=	0.312356510E 02	T= 0.393249432E 01
B32=	-0.108321518E 00	T= -0.154522928E 00
B33=	-0.909295280E-01	T= -0.260896125E 01
B34=	-0.729535200E-01	T= -0.151406476E 01
B35=	-0.414601700E-01	T= -0.116330853E 01

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA READING

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.616545454E 01	0.129250891E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.123282057E 02

B 1=	0.587030580E 02	T= 0.492560087E 01
B32=	0.104545831E 01	T= 0.993953025E 00
B33=	-0.126212572E 00	T= -0.241349418E 01
B34=	-0.181956720E 00	T= -0.251679155E 01
B35=	-0.116127280E 00	T= -0.217159601E 01

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA LISTENING

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.380727272E 01	0.906077144E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.902391643E 01

B 1=	0.154318220E 02	T=	0.176897013E 01
B32=	0.112691537E 01	T=	0.146371070E 01
B33=	-0.878896530E-01	T=	-0.229607567E 01
B34=	-0.439336700E-01	T=	-0.830197534E 00
B35=	0.363200900E-01	T=	0.927890023E 00

REGRESSION OF STUDENT CHARACTERISTICS WITH DELTA WRITING

	AVERAGE	STANDARD DEVIATION
X(32)	0.509090909E 00	0.500372438E 00
X(33)	0.126865454E 03	0.101144682E 02
X(34)	0.125327272E 03	0.775385102E 01
X(35)	0.122741818E 03	0.104361486E 02
Y	0.514909090E 01	0.996604202E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.971797659E 01

B 1=	0.342607790E 02	T=	0.364686549E 01
B32=	0.982137960E-01	T=	0.118459616E 00
B33=	-0.230282539E 00	T=	-0.558639682E 01
B34=	-0.417441200E-01	T=	-0.732484572E 00
B35=	0.430569100E-01	T=	0.102143718E 01

APPENDIX C

An Influence Profile of Significant Variables

The variables are expressed as:

1 = *
2 = aloof vs. sociable
3 = boorish vs. cultured
4 = emotional immaturity vs. emotional stability
5 = submission vs. dominance
6 = serious vs. happy-go-lucky
7 = lack of rigid internal standards vs. super-ego strength
8 = timid vs. adventurous
9 = tough-minded vs. sensitive
10 = accepting vs. suspecting
11 = conventional vs. unconventional
12 = naive vs. sophisticated
13 = confident vs. insecure
14 = conservatism vs. radicalism
15 = group dependency vs. self-sufficiency
16 = uncontrolled vs. controlled
17 = phlegmatic vs. excitable
18 = verbal I. Q.
19 = non-verbal I. Q.
20 = age
21 = socio-economic level judged by father's occupation
22 = yearly income of teacher (and husband if married)
23 = marital status
24 = teacher is childless or has children
25 = years of formal education
26 = years of teaching (excluding the gifted)
27 = years of teaching the gifted
28 = credit hours in courses concerning gifted
29 = grade presently teaching (4, 5, or 6)
30 = number of students in the class
31 = rural or urban location
32 = sex
33 = age (in months)
34 = verbal I. Q.
35 = non-verbal I. Q.

The actual numbers are determined by their exponents in the following fashion:

0.617090909	01	=	6.17090909
0.617090909	02	=	61.7090909
0.617090909	-01	=	0.0617090909
0.617090909	-02	=	0.00617090909

* 1 = the intercept

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA FLUENCY

	AVERAGE	STANDARD DEVIATION
X(4)	0.600000000E 01	0.160850912E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(16)	0.722772277E 01	0.170218535E 01
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850059405E 02	0.181297676E 02
X(28)	0.475247524E 00	0.491748860E 00
X(32)	0.524752475E 00	0.499882116E 00
Y	0.106693069E 02	0.150614992E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.144834264E 02

B 1=	-0.125602227E 02	T= -0.144873033E 01
B 4=	0.174941812E 01	T= 0.270369343E 01
B 7=	0.193590552E 01	T= 0.280644768E 01
B 8=	-0.124619717E 01	T= -0.211217148E 01
B16=	-0.120742921E 01	T= -0.217474743E 01
B18=	0.184729841E 00	T= 0.185071068E 01
B19=	-0.774872750E-01	T= -0.131846576E 01
B28=	0.184567903E 01	T= 0.197123366E 01
B32=	0.497976920E 01	T= 0.393406731E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA FLEXIBILITY

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(4)	0.600000000E 01	0.160850912E 01
X(7)	0.682178217E 01	0.143507673E 01
X(9)	0.676633663E 01	0.198227649E 01
X(10)	0.389108910E 01	0.163482069E 01
X(11)	0.541386138E 01	0.117725044E 01
X(12)	0.591089108E 01	0.180111853E 01
X(15)	0.534257425E 01	0.147447505E 01
X(16)	0.722772277E 01	0.179218535E 01
X(18)	0.102279207E 03	0.109012180E 02
X(19)	0.850099405E 02	0.181297679E 02
X(28)	0.475247524E 00	0.791748860E 00
X(32)	0.524752475E 00	0.499882116E 00
Y	0.348910891E 01	0.786621644E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.761526536E 01

B 1=	-0.204558846E 02	T= -0.395602547E 01
B 2=	0.967299793E 00	T= 0.254102883E 01
B 4=	0.955751540E 00	T= 0.251472788E 01
B 7=	0.561837362E 00	T= 0.167373106E 01
B 9=	-0.909322671E 00	T= -0.277347756E 01
B10=	-0.927292040E 00	T= -0.263790900E 01
B11=	0.210746467E 01	T= 0.424758857E 01
B12=	0.795432512E 00	T= 0.252747219E 01
B15=	0.221586823E 01	T= 0.366709173E 01
B16=	-0.127680460E 01	T= -0.302170848E 01
B18=	0.158408818E 00	T= 0.273635569E 01
B19=	-0.106629741E 00	T= -0.250994056E 01
B28=	0.671060617E 00	T= 0.134626929E 01
B32=	0.169736316E 01	T= 0.247736860E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA ORIGINALITY

	AVERAGE	STANDARD DEVIATION
X(2)	0.627524752E 01	0.169074311E 01
X(4)	0.600000000E 01	0.160850912E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(10)	0.389108910E 01	0.163482069E 01
X(16)	0.722772277E 01	0.179218535E 01
X(18)	0.102279207E 03	0.109012180E 02
X(25)	0.165366336E 02	0.258004562E 00
X(28)	0.475247524E 00	0.791748860E 00
Y	0.684356435E 01	0.147758813E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.143602042E 02

B 1=	0.845073140E 02	T=	0.234664573E 01
B 2=	0.978745630E 00	T=	0.169665251E 01
B 4=	0.259993625E 01	T=	0.392580089E 01
B 7=	0.309060984E 01	T=	0.339175921E 01
B 8=	-0.312926342E 01	T=	-0.376865846E 01
B10=	-0.166915245E 01	T=	-0.271103407E 01
B16=	-0.150733922E 01	T=	-0.240613914E 01
B18=	0.157309854E 00	T=	0.181496524E 01
B25=	-0.616126690E 01	T=	-0.238935540E 01
B28=	0.345244540E 01	T=	0.239618791E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA ELABORATION

	AVERAGE	STANDARD DEVIATION
X(4)	0.600000000E 01	0.160850912E 01
X(7)	0.682178217E 01	0.143507673E 01
X(8)	0.605346534E 01	0.184496119E 01
X(16)	0.722772277E 01	0.179218535E 01
X(29)	0.510891089E 01	0.822561210E 00
X(30)	0.257722772E 02	0.381642541E 01
X(31)	0.667326732E 00	0.471637831E 00
Y	0.128653465E 02	0.315107327E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.308084906E 02

B 1=	0.388685310E 02	T=	0.186358471E 01
B 4=	0.358880718E 01	T=	0.254517858E 01
B 7=	0.408141288E 01	T=	0.276764632E 01
B 8=	-0.289478415E 01	T=	-0.237909125E 01
B16=	-0.391954252E 01	T=	-0.345225158E 01
B29=	-0.176527865E 01	T=	-0.877739087E 00
B30=	-0.693649000E 00	T=	-0.168181958E 01
B31=	-0.394132430E 01	T=	-0.119623971E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA MATHEMATICS

	AVERAGE	STANDARD DEVIATION
X(4)	0.610000000E 01	0.167674548E 01
X(17)	0.480545454E 01	0.164199423E 01
X(21)	0.214545454E 01	0.984731927E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(33)	0.126865454E 03	0.101144682E 02
Y	0.420181818E 01	0.623822725E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.601044042E 01

B 1= 0.234249500E 02	T= 0.440343254E 01
B 4= -0.865242380E 00	T= -0.339617126E 01
B17= -0.512518570E 00	T= -0.220588792E 01
B21= 0.149812330E 00	T= 0.431493015E 00
B29= -0.251974000E 00	T= -0.288610198E 00
B30= -0.253371134E 00	T= -0.328678929E 01
B33= -0.317665000E-01	T= -0.515467910E 00

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA SCIENCE

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(5)	0.528545454E 01	0.212204905E 01
X(6)	0.476909090E 01	0.149904313E 01
X(7)	0.685454545E 01	0.149215534E 01
X(11)	0.559818181E 01	0.135514817E 01
X(12)	0.612727272E 01	0.187743328E 01
X(20)	0.406327272E 02	0.113024177E 02
Y	0.553636363E 01	0.131721661E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.119795433E 02

B 1=	0.238903110E 02	T= 0.371775033E 01
B 2=	0.984618260E 00	T= 0.263977308E 01
B 5=	-0.213097218E 01	T= -0.695030141E 01
B 6=	0.221005780E 01	T= 0.483532073E 01
B 7=	-0.252625147E 01	T= -0.621095893E 01
B11=	0.167337493E 01	T= 0.373976093E 01
B12=	-0.224042767E 01	T= -0.751088240E 01
B20=	-0.499743300E-01	T= -0.789473563E 00

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA SOCIAL STUDIES

	AVERAGE	STANDARD DEVIATION
X(5)	0.528545454E 01	0.212204505E 01
X(6)	0.476909090E 01	0.149904513E 01
X(7)	0.685454545E 01	0.149215534E 01
X(12)	0.612727272E 01	0.187743528E 01
X(33)	0.126865454E 03	0.101144682E 02
Y	0.541272727E 01	0.827039741E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.787051623E 01

B 1= 0.260664000E 02	T= 0.502957150E 01
B 5= -0.872300660E 00	T= -0.467530016E 01
B 6= 0.116009412E 01	T= 0.426821651E 01
B 7= -0.919944100E 00	T= -0.370479681E 01
B12= -0.102752210E 01	T= -0.526949475E 01
B33= -0.707368800E-01	T= -0.193037934E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA READING

	AVERAGE	STANDARD DEVIATION
X(2)	0.617090909E 01	0.165731504E 01
X(5)	0.528545454E 01	0.212204305E 01
X(6)	0.476909090E 01	0.149904313E 01
X(9)	0.680363636E 01	0.198665826E 01
X(12)	0.612727272E 01	0.187743328E 01
X(18)	0.101674545E 03	0.119344556E 02
X(27)	0.214000000E 01	0.199554148E 01
X(30)	0.255636363E 02	0.376622924E 01
Y	0.616545454E 01	0.125250891E 02

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.114830562E 02

B 1= -0.797701600E 01	T= -0.917348025E 00
B 2= 0.879209500E 00	T= 0.238625264E 01
B 5= -0.405119800E 00	T= -0.128078976E 01
B 6= 0.102546764E 01	T= 0.260157559E 01
B 9= 0.115555690E 01	T= 0.377087153E 01
B12= -0.238770170E 01	T= -0.655458657E 01
B18= 0.203085320E 00	T= 0.448538155E 01
B27= -0.272310000E-01	T= -0.780776239E-01
B30= -0.307256400E 00	T= -0.149839299E 01

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA LISTENING

	AVERAGE	STANDARD DEVIATION
X(22)	0.267090909E 01	0.940327564E 00
X(26)	0.964363636E 01	0.642430390E 01
X(27)	0.214000000E 01	0.199554148E 01
X(31)	0.694545454E 00	0.461018979E 00
Y	0.380727272E 01	0.906077144E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.907477437E 01

B 1=	0.295037611E 01	T=	0.250167375E 01
B22=	0.308600010E 00	T=	0.547854157E 00
B26=	0.247758710E-01	T=	0.283127186E 00
B27=	0.137070020E 00	T=	0.571736572E 00
B31=	-0.719328500E 00	T=	-0.713686848E 00

REGRESSION OF SIGNIFICANT ITEMS WITH DELTA WRITING

	AVERAGE	STANDARD DEVIATION
X(4)	0.610000000E 01	0.167674548E 01
X(8)	0.616727272E 01	0.181403700E 01
X(9)	0.680363636E 01	0.198665926E 01
X(10)	0.376363636E 01	0.167879343E 01
X(20)	0.406327272E 02	0.113024177E 02
X(22)	0.267090909E 01	0.040327564E 00
X(24)	0.538181818E 00	0.498993853E 00
X(28)	0.481818181E 00	0.772145050E 00
X(29)	0.514545454E 01	0.810185204E 00
X(30)	0.255636363E 02	0.376622724E 01
X(33)	0.126865454E 03	0.101144682E 02
Y	0.514909090E 01	0.996604202E 01

SUMMARY OF SIGNIFICANCE TESTS

STD DEV= 0.936912439E 01

B 1=	0.947419000E 01	T= 0.904226755E 00
B 4=	-0.654430400E 00	T= -0.185166469E 01
B 8=	0.128184432E 01	T= 0.334709984E 01
B 9=	0.413547777E 00	T= 0.137226974E 01
B10=	0.590301350E 00	T= 0.179829518E 01
B20=	-0.716673690E-01	T= -0.973180818E 00
B22=	0.166650730E 01	T= 0.291389599E 01
B24=	0.161368030E 01	T= 0.893606534E 00
B28=	0.182684640E 01	T= 0.270602858E 01
B29=	-0.284887000E 01	T= -0.214119026E 01
B30=	-0.186521191E 00	T= -0.148062491E 01
B33=	0.225854000E-01	T= 0.234337008E 00

APPENDIX D

Individual Student Data *

* The individual teacher data has been deleted to preserve their anonymity.

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=27 LOCATION=URBAN CLASS NUMBER= 1

STUDENT	S E X	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AN	M	111	123	116	262	263	264	271	254	261	275	271	268	279	265	280	38	51	24	32	19	32	43	63
BA	M	114	123	135	267	272	269	267	271	268	279	286	279	276	277	275	38	51	22	23	30	34	85	87
BE	M	120	126	122	250	259	263	287	259	275	277	283	279	279	284	291	42	32	26	23	48	26	83	100
CR	F	118	129	132	253	264	266	258	262	284	287	307	286	282	288	286	38	79	22	38	29	41	98	185
DA	M	109	123	132	257	265	269	283	262	269	293	276	278	276	269	274	39	67	25	35	19	41	56	102
EF	F	119	129	110	244	251	269	261	268	266	266	267	286	282	257	272	71	79	34	25	27	57	92	105
FE	M	119	120	121	254	253	262	267	251	266	261	280	275	272	259	284	54	67	31	28	25	24	36	64
GO	M	114	121	122	256	263	275	317	257	269	279	283	286	293	288	282	34	28	21	20	30	27	103	64
HE	M	115	130	139	270	266	267	267	265	273	270	303	273	281	271	278	38	55	26	28	36	33	26	85
JO	F	110	131	130	262	270	277	279	263	269	268	286	280	290	275	279	56	88	27	49	37	69	75	76
MA	M	118	128	114	259	258	273	273	260	278	277	278	291	299	280	276	52	79	33	44	32	26	72	71
MC	F	110	133	130	251	269	267	279	257	278	284	292	282	286	277	286	43	75	28	33	26	55	64	105
MO	M	118	125	109	269	274	273	291	273	288	284	295	294	303	288	286	30	43	23	27	23	29	31	40
NE	F	108	130	130	257	258	263	273	251	269	272	280	276	293	266	284	64	70	31	38	36	37	70	104
PH	F	118	132	136	253	264	275	271	266	261	279	295	284	306	284	280	50	89	28	51	49	63	53	111
PI	F	114	139	126	260	266	267	276	260	271	279	298	288	303	277	282	54	60	30	39	26	45	108	95
RI	F	118	125	109	256	251	280	257	263	250	272	249	288	278	273	288	38	41	18	23	26	28	63	41
RO	M	118	125	118	259	256	275	273	268	275	282	298	276	288	271	280	24	32	18	22	25	23	22	32
SI	M	126	122	120	260	270	273	283	251	266	290	292	274	275	278	288	41	64	32	36	30	22	34	74
SJ	M	109	128	118	245	257	277	273	255	261	268	292	275	274	257	278	33	43	25	34	23	31	52	70
ST	F	115	126	121	256	252	267	273	261	269	268	286	282	286	275	269	59	69	25	33	37	54	66	109
SU	F	118	134	125	257	261	266	279	265	269	282	295	288	290	278	288	58	77	38	49	31	49	97	107
TA	F	107	123	105	258	260	262	271	254	260	259	278	266	267	262	278	45	60	21	32	32	56	52	78
VA	F	113	124	125	254	250	267	261	253	259	282	274	278	275	280	284	60	84	22	37	41	50	161	165
WA	M	118	131	120	260	270	275	276	268	271	287	295	294	296	277	291	33	42	20	28	30	36	39	38
WO	F	116	116	109	249	250	263	262	253	258	268	261	284	269	269	276	47	61	36	38	36	41	71	74

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=24 LOCATION=URBAN CLASS NUMBER= 2

STUDENT	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	M	104	131	116	264	269	296	277	263	271	289	293	282	291	288	288	28	54	18	17	32	46	78	118
BA	M	112	113	114	265	266	262	277	261	265	278	284	279	284	282	295	22	29	18	19	20	12	60	69
BB	M	110	116	126	250	256	266	260	259	256	286	275	278	276	256	280	33	47	22	29	13	31	30	66
BU	M	110	126	100	260	269	283	277	269	271	280	284	275	280	279	280	27	25	15	15	16	21	48	70
CH	M	111	138	119	250	256	269	271	256	260	283	275	276	282	267	269	45	62	26	36	32	46	53	79
CO	M	114	130	116	254	265	271	277	268	281	278	293	286	297	280	295	29	41	22	22	21	41	41	44
DO	M	119	114	120	266	274	291	275	253	266	265	296	296	284	270	275	20	31	17	20	12	18	13	49
ED	M	108	123	122	258	272	286	273	271	269	274	282	278	294	261	278	26	29	18	16	25	29	40	95
FO	F	119	120	134	252	259	276	266	263	268	289	272	286	284	270	271	54	62	26	36	27	33	65	50
GA	M	119	130	132	266	269	263	277	271	268	267	265	282	294	256	264	22	48	17	33	14	51	54	62
GB	M	108	127	128	251	254	262	267	254	268	269	279	275	279	252	275	60	70	21	25	74	63	111	120
GL	M	106	135	123	260	267	296	275	273	278	278	277	290	297	265	282	28	39	12	18	19	22	16	39
HO	F	116	110	97	250	246	258	260	249	253	252	282	268	269	262	282	23	23	14	18	13	10	34	37
LE	F	110	135	122	260	260	267	267	266	260	274	282	274	284	276	282	57	65	31	30	28	33	82	105
LY	M	112	99	117	247	257	262	275	252	257	276	255	275	273	266	275	23	38	20	22	15	25	50	53
MA	F	111	126	110	258	254	276	266	259	266	274	284	274	276	272	277	58	42	30	21	39	21	81	78
MC	M	119	132	121	254	262	271	267	257	268	280	282	278	284	270	280	32	62	26	37	31	57	49	72
PA	F	120	127	141	265	267	283	277	278	271	298	290	282	294	286	299	61	72	18	35	24	47	61	68
PO	F	110	114	119	252	250	263	271	261	263	303	275	276	280	284	299	54	58	33	29	36	30	107	105
SP	M	115	121	123	254	258	276	271	273	269	274	284	282	279	272	278	26	48	21	25	13	45	35	55
TR	F	114	125	126	258	260	271	273	259	265	292	290	281	282	275	280	36	46	26	24	20	35	85	77
WE	F	110	132	126	252	249	262	264	258	252	283	279	267	276	279	288	31	45	27	36	24	30	54	62
WI	F	107	118	108	259	260	269	280	254	254	292	270	273	284	260	295	24	52	15	26	23	40	27	68
ZU	M	112	132	134	253	258	264	277	266	273	269	287	281	286	259	275	49	65	28	36	28	45	56	82

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=24 LOCATION=URBAN CLASS NUMBER= 3

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
BA	M	138	131	120	267	274	273	275	284	284	289	287	303	297	288	305	74	67	42	29	74	53	77	99
BB	F	131	128	115	256	270	276	275	269	268	278	279	282	288	272	288	42	60	28	24	36	28	43	62
BI	M	130	132	138	276	278	302	288	281	292	298	303	286	297	288	305	39	74	25	37	45	51	78	79
BO	M	135	127	116	266	264	271	275	281	275	292	290	286	291	278	286	56	55	19	33	51	42	75	65
CU	M	141	119	129	272	272	296	280	281	281	295	284	299	301	279	284	34	39	16	30	28	29	87	80
DO	M	137	119	130	267	272	271	275	268	269	283	293	284	282	274	286	34	30	17	25	21	32	83	51
DU	M	136	115	102	266	257	261	269	266	266	274	277	279	278	269	280	75	70	47	35	58	64	130	57
GO	F	143	123	118	267	272	273	277	281	288	295	282	288	301	291	305	57	84	26	36	37	63	113	125
HA	F	132	134	119	269	276	296	284	284	284	283	296	299	286	282	320	85	63	31	27	86	26	76	76
HE	M	133	122	130	269	269	287	275	273	278	289	290	284	291	276	299	30	35	14	31	31	32	20	52
JO	F	134	130	116	251	263	273	288	273	271	280	290	293	304	282	284	38	56	25	34	71	46	98	85
LO	M	143	119	111	266	274	276	267	281	284	274	282	288	279	272	288	32	32	18	19	33	31	68	90
MC	F	140	128	122	269	278	302	273	288	292	303	284	299	304	284	286	54	96	28	37	35	64	53	85
MD	F	139	132	133	276	276	279	288	284	288	303	303	299	314	286	305	36	47	25	32	32	28	66	97
ME	F	143	122	113	263	270	267	277	269	281	292	287	296	297	286	295	38	80	24	40	22	52	41	39
NI	M	142	120	127	270	270	302	280	284	281	315	290	306	288	291	295	52	48	22	24	35	37	58	76
NO	F	136	123	115	267	264	266	266	262	265	486	266	278	282	274	277	49	75	30	22	33	52	78	75
PE	F	137	116	137	267	269	283	269	281	273	295	284	290	286	291	291	55	74	27	30	33	46	78	116
RO	F	130	127	127	269	270	264	280	262	292	292	279	278	294	279	291	40	72	24	37	22	51	62	87
SE	M	129	120	132	272	272	276	277	284	273	295	293	290	284	276	286	61	58	34	33	36	53	86	78
TA	M	141	120	129	279	274	310	280	269	278	286	293	296	297	278	288	50	54	32	27	45	32	27	60
TH	M	132	127	134	270	274	283	284	269	278	292	284	279	288	286	299	55	45	23	32	40	34	77	79
VE	F	134	126	134	272	286	279	284	269	281	280	282	270	297	276	282	77	70	43	36	63	43	45	88
WI	M	131	128	133	267	278	273	277	281	281	283	287	282	294	274	288	81	70	35	35	88	64	54	67

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=23 LOCATION=RURAL CLASS NUMBER= 4

STUDENT CHARACTERISTICS					MATH		SCIENCE		SOC STUD		READING		LISTEN		WRITING		FLUENCY		FLEX		ORIG		ELAB	
	SEX	AGE MOS	IQ NON-VERB	IQ VERB	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST
AN	F	137	114	116	252	258	266	260	258	262	265	266	268	280	279	266	51	68	26	28	35	50	64	57
BL	F	134	112	121	261	262	264	251	251	259	265	253	274	276	256	255	54	53	30	33	29	31	80	91
BR	F	138	100	113	259	251	266	260	263	265	298	287	269	280	276	275	85	83	32	35	49	54	113	113
CA	F	133	119	128	254	258	258	260	261	263	253	260	278	276	269	273	42	59	13	24	18	41	144	121
CH	F	142	100	133	260	265	273	263	265	263	280	275	271	286	279	278	52	67	30	30	23	26	73	89
CL	M	135	111	122	265	270	263	269	261	257	269	263	269	278	259	266	55	61	27	26	33	47	54	74
CO	F	138	118	131	265	263	266	257	266	266	289	287	290	288	279	274	54	92	27	34	23	39	53	76
EZ	F	133	124	125	261	264	287	264	263	275	276	268	279	294	276	277	54	88	25	26	34	43	95	129
GR	F	137	128	130	265	270	279	277	273	281	292	287	296	284	298	295	43	75	28	42	25	61	79	94
HE	M	142	122	128	261	272	283	267	278	278	276	272	279	288	276	277	88	68	34	31	58	43	63	101
HF	F	132	126	129	260	266	276	262	255	261	276	263	272	282	275	280	59	78	31	38	41	58	80	104
JO	M	142	122	125	265	276	267	271	275	278	280	282	281	278	279	280	54	72	31	37	54	42	81	52
KE	F	143	122	129	264	267	266	267	261	271	280	287	290	288	266	274	46	43	23	27	28	24	64	72
MA	M	134	116	108	267	274	264	266	269	281	260	275	279	275	279	280	56	63	33	34	50	41	61	109
PO	M	136	128	131	269	274	283	275	273	284	289	279	288	291	275	265	56	45	28	22	50	31	56	75
RI	F	143	129	124	274	276	279	267	288	278	307	299	288	301	286	291	47	43	22	28	32	21	96	104
SC	M	142	122	133	274	269	276	273	288	281	286	268	281	286	278	291	47	68	31	37	35	53	65	138
SU	F	143	121	102	253	259	263	273	268	260	286	290	284	294	284	299	68	90	45	40	56	70	60	65
SV	M	143	117	124	263	270	263	277	281	278	286	290	276	286	267	291	47	36	28	25	37	25	53	56
TH	M	141	120	134	263	270	267	275	275	288	265	282	286	294	276	278	42	54	72	22	26	28	45	84
TO	F	134	127	134	265	266	263	262	269	266	283	277	279	284	282	288	58	61	29	37	43	60	47	86
WE	F	132	123	126	256	252	258	261	259	261	255	270	276	278	270	271	66	60	35	30	56	21	45	80

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=35 LOCATION=RURAL CLASS NUMBER= 5

STUDENT	S E X	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	F	115	119	121	250	251	260	280	251	269	276	279	272	282	270	305	62	72	27	34	36	47	78	86
AN	F	112	119	110	249	257	258	260	247	258	256	259	266	273	262	268	54	56	16	23	41	34	74	42
BR	F	100	130	126	252	264	260	267	271	271	280	272	274	282	266	286	58	55	28	18	39	37	47	70
CA	M	112	122	121	259	245	259	261	263	271	280	290	276	273	267	275	62	40	27	24	33	40	97	120
CR	F	114	123	133	256	256	266	267	268	268	260	279	275	286	262	277	84	97	41	36	66	49	78	94
DA	F	110	125	127	257	256	276	264	254	265	257	275	279	264	264	255	62	86	33	37	52	60	118	103
DE	M	114	123	120	256	250	256	232	246	259	240	272	261	253	253	237	34	20	19	18	19	16	17	25
EB	M	109	136	128	264	272	263	266	265	260	280	279	275	284	270	284	42	76	26	29	24	51	55	50
FL	F	115	123	129	258	265	266	275	273	273	276	296	284	291	280	288	34	62	16	27	25	29	43	90
FO	F	119	128	130	259	251	269	262	259	278	276	284	279	284	276	275	57	116	38	52	38	84	84	99
FR	M	113	130	139	260	267	271	263	249	263	265	275	273	276	270	278	47	62	21	27	27	35	45	79
GO	M	115	121	111	251	247	254	263	251	260	265	270	272	279	262	275	57	91	34	36	33	58	49	94
GR	F	118	117	114	256	252	260	264	258	261	267	277	271	280	276	275	88	86	39	36	45	40	53	67
HA	F	117	129	138	261	270	259	273	261	269	280	290	274	284	267	280	77	75	34	34	33	45	82	88
HB	F	119	124	129	252	253	254	257	255	263	250	270	274	273	256	268	45	81	26	33	18	51	41	71
HU	M	110	133	114	253	256	258	269	262	265	263	279	269	275	261	271	50	63	26	31	38	45	56	58
JA	F	124	117	126	247	256	260	266	253	268	261	279	271	280	262	282	53	55	39	32	33	34	70	78
JO	F	112	129	126	253	260	266	269	266	258	261	275	279	282	265	278	57	65	37	38	29	41	82	127
KI	M	112	112	110	241	256	257	258	244	258	446	268	262	262	257	257	52	47	29	32	31	27	47	89
KJ	M	112	122	118	253	252	264	266	257	468	456	254	271	273	252	259	46	55	31	29	45	33	63	59
LA	F	107	123	135	257	249	252	261	251	257	269	287	263	280	272	278	36	33	30	21	13	28	37	53
LE	F	109	120	123	240	246	257	259	249	244	263	266	270	282	261	251	34	57	18	34	34	25	42	124
MC	F	114	126	128	256	265	257	267	256	260	280	290	276	275	269	284	48	62	31	36	39	53	49	59
ME	F	111	124	120	244	240	259	259	259	266	267	287	270	284	267	278	40	60	22	29	24	47	62	89
MO	M	120	111	114	258	259	255	267	252	262	257	279	262	288	269	275	37	69	22	25	21	33	89	86
MU	M	118	134	109	254	265	260	271	257	263	274	290	282	279	267	284	58	59	24	37	33	26	31	90
PO	F	114	116	133	257	257	258	251	255	262	278	279	279	284	274	280	43	49	17	24	19	16	70	64
RE	F	122	108	115	250	256	254	260	251	256	269	290	261	268	261	277	42	54	31	23	26	26	77	69
SC	F	112	126	127	243	241	254	261	248	256	253	275	276	279	275	274	74	100	32	39	34	51	144	123
SM	F	109	124	120	256	266	262	269	253	266	271	268	276	288	279	286	74	74	37	36	57	47	97	86
TU	M	119	104	120	236	230	239	235	236	245	233	247	249	258	234	237	89	45	26	24	27	43	63	84
WA	F	112	121	123	254	242	266	261	252	259	269	282	266	270	266	275	60	92	30	33	25	65	64	94
YO	M	119	121	134	257	256	260	267	263	275	265	268	272	282	265	273	76	80	28	34	44	77	53	59

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=24 LOCATION=URBAN CLASS NUMBER= 6

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	F	131	134	129	266	282	273	279	269	284	293	295	301	282	288	294	62	86	38	41	32	59	125	170
AR	M	135	128	116	278	279	275	310	288	284	290	307	304	296	291	303	32	35	23	27	36	47	35	64
BA	F	141	118	118	269	269	269	287	271	278	284	298	280	299	299	294	75	62	33	36	56	50	161	212
BL	M	140	118	116	274	276	293	287	288	284	290	303	301	290	295	284	38	37	24	21	36	24	54	65
BO	M	141	126	122	264	279	273	324	273	288	272	292	301	306	275	280	56	44	35	34	60	38	54	77
BR	F	131	125	133	265	276	273	283	268	292	290	298	288	288	291	294	77	106	34	30	62	49	61	129
DO	M	138	121	116	267	272	288	283	281	284	290	298	297	306	284	278	36	57	24	35	46	38	41	102
FR	F	138	132	120	269	287	280	302	281	292	293	319	309	306	320	298	53	78	29	40	46	77	73	158
FU	F	137	130	125	259	263	266	279	257	265	268	283	301	279	282	282	85	78	44	43	63	66	78	122
GR	F	131	132	131	269	269	275	264	265	266	282	298	280	286	282	279	57	54	31	31	34	32	52	55
LA	F	133	128	125	266	274	293	273	275	278	290	292	288	303	282	286	59	69	28	32	30	31	92	104
MC	F	144	124	123	272	276	288	273	281	284	287	283	301	303	291	288	54	57	36	40	30	34	70	56
MO	M	133	128	122	282	279	288	324	271	292	284	303	301	306	291	288	38	59	30	37	37	35	51	80
MP	F	137	119	117	264	269	269	269	257	266	296	303	286	296	299	288	59	76	35	46	36	38	119	113
MU	F	140	125	118	269	282	269	296	288	296	299	315	301	306	295	288	36	62	24	29	21	39	73	125
RA	F	130	128	95	259	269	263	276	266	275	284	292	288	303	288	286	43	46	33	32	38	33	62	110
SM	M	133	124	100	266	270	266	283	262	271	293	295	286	279	284	280	25	47	24	34	23	40	52	76
SW	M	136	121	111	267	274	284	296	278	288	287	307	284	293	295	288	36	49	19	27	35	35	116	173
VA	F	139	127	123	272	282	284	279	288	292	296	303	291	303	310	298	42	67	24	41	36	47	173	69
WA	M	141	116	132	282	287	293	324	281	300	287	303	304	311	305	294	61	64	36	38	70	56	99	60
WH	M	132	94	119	272	282	277	310	281	292	284	298	301	299	275	282	38	57	17	36	38	50	181	166
WI	F	131	130	122	269	274	266	279	278	288	293	307	301	303	284	282	54	68	39	45	50	56	68	166
WO	F	139	132	119	276	276	280	324	273	288	296	307	297	303	305	291	26	37	11	28	22	31	106	72
WY	F	135	127	124	267	272	273	271	268	278	279	286	301	306	291	276	49	63	24	43	30	50	91	101

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=23 LOCATION=URBAN CLASS NUMBER= 7

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	F	142	115	112	266	270	269	262	273	269	290	298	286	293	291	298	42	40	26	18	41	24	52	57
AT	M	133	133	117	272	272	271	283	281	275	279	283	288	288	278	278	40	38	31	22	38	37	45	50
BA	M	141	118	122	272	279	271	279	271	284	279	303	286	290	284	286	82	97	20	29	41	48	58	63
BO	F	142	124	121	272	282	280	283	281	284	284	298	278	323	278	276	55	54	41	38	45	38	105	70
BR	F	135	131	130	286	274	277	291	278	281	296	307	309	311	291	294	42	59	25	31	32	51	83	116
CO	M	136	128	127	272	279	260	287	275	278	282	298	297	288	269	284	55	49	31	37	33	33	62	53
GO	F	132	131	134	259	264	275	269	268	275	296	283	278	303	286	291	54	57	33	30	31	39	99	77
GR	F	136	127	139	269	276	277	267	262	269	284	298	284	284	291	288	51	66	28	34	35	29	80	69
GS	M	133	119	133	276	276	273	267	263	278	272	298	278	279	284	280	77	70	45	33	49	50	59	64
LE	F	135	128	108	266	261	269	283	273	284	287	292	286	296	278	284	24	51	14	26	18	38	26	64
MO	M	139	127	114	272	274	275	283	268	281	284	298	294	299	286	284	65	101	30	40	47	61	79	65
SC	M	134	121	121	276	274	271	283	275	292	284	298	304	293	284	274	68	63	33	31	55	50	39	37
SH	F	140	127	134	276	274	262	296	292	292	272	307	297	299	280	282	42	74	33	43	32	60	80	63
SI	F	140	120	124	258	259	271	269	266	273	290	292	291	288	299	286	60	80	33	33	35	57	109	58
SP	M	137	122	117	276	279	273	291	263	292	287	292	291	282	282	274	36	41	27	32	22	31	70	115
ST	M	135	129	139	282	276	275	302	292	284	299	311	288	311	284	286	53	57	24	23	40	40	72	68
SU	F	134	132	131	269	282	280	317	275	278	282	298	286	299	291	294	38	51	19	22	23	39	47	51
WA	F	139	127	135	278	274	273	273	269	266	284	298	294	275	295	294	50	62	30	39	37	61	74	69
WI	M	139	126	126	265	269	267	302	271	281	279	292	286	282	288	286	57	80	36	33	27	73	91	87

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=23 LOCATION=RURAL CLASS NUMBER= 8

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AD	F	131	115	125	258	270	279	288	265	275	286	277	274	294	279	299	76	74	39	36	54	28	116	150
AR	F	126	134	118	265	264	283	284	278	284	486	290	293	304	288	288	67	89	36	32	39	55	115	86
CL	M	123	133	129	270	276	283	277	281	281	278	290	288	286	284	288	25	49	18	27	21	29	47	70
DA	F	128	136	128	258	266	267	263	268	275	280	296	286	294	286	310	72	92	37	36	65	83	102	67
FR	M	132	127	129	263	265	291	284	292	281	295	296	282	301	291	299	63	96	31	45	36	76	87	178
GA	M	122	134	140	267	272	273	288	281	275	286	284	282	297	269	305	48	69	24	36	38	46	95	97
JE	M	121	134	136	266	278	273	280	273	284	283	299	282	291	286	295	56	64	32	36	45	70	56	25
JO	F	128	99	118	260	266	259	263	254	261	267	275	276	282	274	295	53	51	30	32	33	45	93	75
KI	F	129	131	134	267	274	283	288	269	275	289	290	290	294	294	299	65	82	38	38	38	49	98	91
MC	F	127	134	136	269	269	291	284	296	281	278	293	288	294	288	305	55	92	42	39	53	64	99	106
MO	M	127	135	100	261	266	296	284	268	275	289	293	296	284	288	286	41	43	29	18	25	30	54	45
PE	F	118	132	118	257	274	263	284	263	268	260	282	278	288	275	288	53	61	33	33	33	44	98	133
PF	F	128	132	127	254	258	271	280	262	271	286	293	273	288	274	305	35	78	22	32	25	41	30	94
PO	M	126	125	128	258	267	260	273	263	273	263	290	281	279	275	305	46	65	31	41	41	58	52	103
RO	M	119	135	138	258	269	276	271	262	273	274	282	279	276	260	273	42	63	30	35	36	47	58	56
RP	F	130	132	135	270	274	283	297	278	281	283	299	299	297	280	291	63	80	40	37	39	54	127	64
ST	F	129	135	130	260	263	273	280	263	271	278	287	279	282	279	277	62	85	31	33	43	57	81	120
SU	M	129	122	123	258	272	273	284	273	288	292	296	296	291	280	288	58	76	31	38	43	71	93	76
TR	F	122	128	124	250	263	264	277	262	269	271	290	290	286	274	282	58	65	35	33	41	43	80	71
WI	F	129	128	137	259	269	279	284	278	284	283	296	299	309	284	286	52	68	29	36	36	46	68	143
WJ	M	121	133	131	257	270	263	288	268	273	278	282	286	291	272	299	96	72	38	35	39	35	69	82
ZU	F	125	123	122	259	262	266	275	269	278	276	287	290	294	270	278	60	77	34	46	45	67	61	101

80

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=30 LOCATION=URBAN CLASS NUMBER= 9

STUDENT CHARACTERISTICS					MATH		SCIENCE		SOC STUD		READING		LISTEN		WRITING		FLUENCY		FLEX		ORIG		ELAB	
	SEX	AGE MOS	IQ NON-VERB	IQ VERB	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST
BE	F	124	131	112	264	269	277	287	268	275	279	286	288	296	273	288	58	62	34	31	36	32	97	109
HF	F	128	124	118	258	265	263	271	260	265	270	289	280	281	258	275	58	80	41	43	49	51	92	101
BL	F	124	134	126	253	265	280	283	269	275	290	303	282	290	277	280	54	65	40	38	29	49	90	114
BR	F	126	132	137	265	272	264	279	273	288	287	289	284	286	275	288	88	68	49	30	67	65	85	90
CH	M	129	129	135	270	272	271	276	269	278	272	286	278	284	282	282	25	33	18	22	15	31	40	29
CO	M	126	129	128	264	266	269	271	273	284	266	292	286	290	274	282	51	77	22	29	32	34	78	119
CP	M	124	131	138	264	270	269	287	262	278	270	286	278	299	271	284	35	33	22	26	36	26	49	45
GR	M	128	129	125	269	260	264	264	263	261	266	274	282	293	269	266	43	67	26	37	32	58	65	98
HE	M	123	131	123	258	264	264	276	262	275	270	278	291	281	274	272	59	55	28	28	62	68	92	120
HO	F	129	130	134	264	272	267	287	269	292	293	303	286	311	286	284	40	23	27	15	34	22	46	27
HP	M	123	132	120	257	256	263	269	271	278	277	278	284	284	284	276	55	51	28	29	38	63	85	106
JJ	M	131	128	110	262	269	261	266	261	268	266	289	280	282	282	279	68	91	28	32	27	57	85	46
JO	F	118	137	117	270	266	273	276	275	284	284	286	286	293	295	291	55	82	32	41	43	46	69	92
LI	M	130	132	122	262	266	269	296	271	278	282	307	284	288	280	294	38	38	19	21	33	35	31	57
NE	M	128	127	106	264	267	266	266	284	292	287	292	286	296	284	278	35	63	22	30	32	41	47	55
PA	M	129	129	124	264	270	266	273	266	278	290	298	309	296	284	291	69	66	38	30	53	34	134	94
SC	F	128	133	123	253	267	275	279	271	278	282	298	297	303	291	284	60	62	25	27	54	75	129	224
SD	F	120	127	135	262	267	273	276	273	281	282	283	291	282	277	282	60	58	33	39	40	35	106	74
SH	M	130	124	135	269	270	269	287	275	273	275	292	288	293	282	278	46	67	23	31	52	51	82	111
SM	M	132	125	129	263	260	264	271	266	273	290	292	284	293	282	278	46	40	25	25	28	34	34	75
SP	F	124	126	127	259	264	277	276	263	269	282	303	276	303	295	282	28	62	19	38	28	49	30	79
ST	F	125	112	117	242	257	252	291	251	278	251	292	276	279	258	275	26	49	17	34	19	40	46	95
SU	M	129	129	135	263	267	267	276	269	271	284	286	291	288	265	291	51	56	31	30	29	37	59	44
SW	F	127	127	129	251	240	269	233	242	263	253	260	282	281	253	269	33	63	12	25	19	40	71	128
TA	F	126	128	129	251	257	266	283	259	263	260	276	268	279	271	276	56	64	40	43	31	32	60	79
TR	M	128	124	128	266	261	275	273	279	278	279	280	288	303	275	272	35	58	20	36	30	52	37	101
VE	M	130	127	142	269	264	275	291	269	269	277	280	280	286	284	276	36	36	25	25	21	20	27	44
WO	M	123	123	125	262	254	273	273	265	269	284	283	286	296	273	279	43	63	25	31	44	62	54	64
WP	F	125	130	132	267	276	269	302	269	284	277	295	288	288	291	288	90	73	45	35	50	38	116	107

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=23 LOCATION=RURAL CLASS NUMBER=10

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	M	133	125	125	269	286	276	288	269	269	295	279	288	294	284	305	42	73	22	28	24	47	44	67
BY	F	140	116	116	274	274	269	264	296	275	298	293	284	294	286	291	38	71	28	40	28	47	37	65
DA	F	137	125	128	256	278	287	271	278	271	292	293	293	291	280	291	62	94	36	43	28	43	73	114
DU	F	133	115	125	261	266	266	261	266	275	289	284	279	284	286	299	55	80	35	44	45	74	82	112
GA	F	138	128	129	263	265	273	280	273	263	295	284	284	291	282	286	44	83	31	38	33	55	31	57
HE	F	139	124	108	267	270	276	293	284	288	315	308	293	297	286	299	49	60	33	23	24	21	36	58
HY	M	137	123	112	260	272	269	280	273	288	298	290	290	291	275	291	35	65	20	22	21	22	57	53
JA	F	136	115	123	279	270	273	275	273	273	280	282	288	288	284	288	42	52	25	26	26	36	32	54
LA	M	134	120	121	258	265	267	277	263	262	274	284	269	278	284	286	52	72	32	32	29	35	83	130
LE	M	136	123	136	270	270	310	284	284	284	280	282	299	286	291	284	52	52	33	34	38	41	57	40
MA	M	135	124	124	270	276	266	269	281	281	295	287	288	280	279	282	41	49	27	29	29	59	46	64
ME	M	142	110	99	267	267	291	273	275	281	271	277	281	279	276	284	53	58	29	34	37	35	80	55
MI	F	113	129	119	265	264	271	273	273	269	298	284	290	286	294	286	43	89	30	42	27	61	68	84
PA	M	135	116	124	264	274	287	273	281	271	276	290	284	282	278	277	56	68	35	32	34	48	78	86
PO	F	149	114	107	267	276	283	284	278	288	289	284	290	297	274	305	70	89	32	40	35	35	60	66
PP	F	141	123	129	274	272	291	277	281	266	295	287	290	288	284	291	71	96	33	34	47	68	51	70
SH	M	134	123	113	276	276	291	293	281	281	295	293	290	291	279	277	63	81	36	36	49	41	45	82
SI	M	133	121	115	279	278	276	288	284	281	298	290	293	286	284	291	30	40	23	26	30	22	36	66
SU	M	133	125	102	264	267	256	262	261	263	256	260	262	279	274	280	18	53	10	22	3	18	10	37
WA	M	131	123	118	274	274	291	275	281	292	292	293	306	301	280	291	43	66	30	37	40	52	44	55
WH	F	140	122	120	265	267	296	284	275	284	283	277	303	282	284	310	42	61	32	35	30	41	53	73
WI	F	142	121	128	267	278	302	273	275	275	292	296	299	288	280	291	73	88	31	30	20	27	49	71

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=23 LOCATION=URBAN CLASS NUMBER=11

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AN	F	110	127	128	247	260	260	273	254	269	269	290	270	280	278	282	72	99	35	49	48	71	90	138
AR	M	117	122	119	256	265	279	288	256	275	257	284	279	301	261	278	50	50	23	23	51	48	31	66
BE	F	116	131	112	245	262	266	284	255	273	286	299	266	297	275	288	59	76	33	38	56	55	69	53
BO	F	109	129	130	257	266	263	280	258	265	289	299	284	301	282	288	54	64	22	33	40	37	28	53
CL	M	119	120	113	253	263	271	273	261	262	260	287	278	282	266	255	38	53	21	36	25	48	95	84
DA	M	115	122	123	254	269	267	275	260	268	267	279	278	280	261	275	38	43	21	32	25	43	94	65
EA	M	119	121	114	253	264	267	293	262	271	267	282	279	294	272	284	66	76	33	46	51	73	143	142
FO	M	129	129	130	252	265	266	288	265	266	283	282	281	279	280	282	43	48	22	36	39	40	66	63
GO	F	109	122	114	244	259	269	288	252	265	283	282	275	286	276	280	44	68	23	36	31	47	52	84
HA	M	111	125	114	249	258	260	277	255	263	271	282	282	280	267	277	24	41	15	28	25	32	9	37
LA	F	113	129	120	260	264	264	280	254	268	274	279	267	276	266	278	23	79	17	33	22	44	37	129
LO	M	115	115	119	245	264	261	266	249	251	255	259	267	267	252	250	23	18	12	10	21	19	13	13
MO	F	109	136	132	260	260	269	271	268	275	283	296	288	294	272	286	19	22	16	7	18	17	19	9
PA	F	112	134	124	264	269	262	275	260	284	265	296	272	288	275	280	37	60	25	28	25	32	37	76
RU	M	117	125	136	264	265	267	273	258	268	286	279	279	291	279	275	55	57	35	39	42	50	38	79
SA	F	113	131	132	261	267	271	273	259	271	269	293	284	286	272	284	36	58	23	29	37	37	44	58
SB	F	112	126	127	254	274	273	288	260	266	267	290	286	301	275	295	50	53	33	31	31	41	65	67
SE	M	106	131	128	258	272	266	271	261	284	265	282	278	286	265	286	41	37	26	20	34	32	72	66
SH	F	111	128	131	259	266	263	284	261	271	276	284	281	297	280	286	43	41	32	31	47	33	54	126
SI	F	111	130	116	252	265	261	271	257	268	274	277	275	282	280	273	39	65	27	31	31	67	64	112
ST	M	109	126	125	261	270	264	280	262	273	283	270	278	282	275	280	47	78	38	43	47	61	104	131
TI	F	111	132	125	253	259	267	264	275	271	263	260	282	286	265	273	22	22	15	17	17	21	77	92

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=21 LOCATION=URBAN CLASS NUMBER=12

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
BA	F	110	127	122	240	263	256	264	269	262	266	280	279	290	264	276	53	70	34	34	48	38	53	81
CO	F	113	117	130	254	258	269	269	260	278	275	292	282	279	278	294	29	42	19	22	17	33	44	58
DO	M	115	110	131	246	253	264	269	262	263	265	280	276	288	259	269	69	79	29	42	55	70	76	102
FI	M	114	106	138	252	267	264	276	257	266	282	283	282	288	286	286	92	100	35	30	40	48	80	128
FR	F	117	122	130	267	265	261	279	260	278	265	311	282	286	278	284	37	44	26	28	18	33	66	70
GA	M	117	120	127	260	259	261	279	251	266	259	271	275	296	250	274	50	73	32	39	49	70	69	82
HO	M	111	121	131	254	266	277	296	259	284	279	292	288	306	265	279	47	59	27	38	32	47	53	87
HP	F	113	129	127	252	264	261	273	262	275	284	295	301	306	284	286	52	49	21	37	35	39	63	84
JO	M	113	127	116	249	252	257	264	256	262	270	278	267	278	264	274	50	58	28	36	48	55	75	112
NE	F	119	123	130	263	259	277	283	258	268	275	292	286	284	275	291	80	58	40	34	63	38	109	86
OS	F	111	121	126	256	267	277	296	260	273	277	311	282	286	278	286	60	70	33	40	41	54	157	118
PA	M	115	126	118	253	261	275	287	263	265	290	280	282	275	274	291	25	38	16	32	15	27	66	78
PB	F	114	130	118	254	264	271	262	268	265	287	292	294	284	274	282	55	65	27	36	33	49	79	73
SL	F	112	115	103	259	260	266	271	252	258	266	283	291	288	259	275	38	31	20	17	31	25	39	35
SN	M	121	117	123	251	263	264	271	259	278	270	278	280	279	262	275	44	47	25	27	32	26	55	77
SP	M	113	130	131	265	270	264	296	260	275	266	292	276	282	264	286	48	56	22	26	22	31	72	86
SY	M	120	117	112	265	270	266	302	275	284	284	283	286	303	275	282	40	52	24	29	17	42	33	82
WI	F	113	113	131	245	261	262	279	266	275	279	295	274	286	274	284	48	81	17	35	31	53	62	97

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=28 LOCATION=URBAN CLASS NUMBER=13

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AN	M	128	124	123	269	276	264	275	275	278	286	287	284	286	280	291	61	57	30	36	45	48	177	80
BR	F	125	131	127	263	269	260	266	273	271	295	279	275	286	278	291	45	84	36	40	47	66	82	62
CA	F	121	128	117	266	266	283	271	278	273	303	293	290	288	275	305	55	64	34	25	46	47	240	144
CR	M	123	134	114	265	276	273	277	261	281	295	290	278	294	280	295	65	48	44	34	58	32	111	76
DE	M	125	128	125	269	266	287	284	275	281	280	290	281	288	280	288	33	40	22	24	17	23	47	53
DU	M	130	132	133	267	270	296	280	281	284	286	303	296	291	284	288	56	35	36	22	40	29	70	46
GR	M	129	107	119	265	270	283	288	266	278	292	284	281	294	262	284	97	64	47	32	66	49	128	140
HA	F	128	133	122	263	272	271	280	263	273	303	290	288	294	288	310	81	47	32	22	69	37	221	173
HI	M	131	129	134	260	267	287	293	278	273	307	296	274	291	282	284	77	71	26	41	98	74	137	66
JO	F	124	133	129	257	259	269	277	263	261	278	282	286	286	269	295	44	42	33	32	20	31	93	68
JP	M	121	131	113	252	258	273	271	269	271	280	282	274	291	280	284	51	52	31	24	42	26	54	97
MA	F	123	132	138	266	267	273	288	266	278	303	227	296	286	274	288	79	90	41	33	53	48	159	119
MC	F	131	122	133	256	269	271	275	271	266	295	284	290	285	276	278	26	30	22	18	38	19	71	82
MI	M	128	118	115	261	267	263	277	268	266	267	277	272	282	274	299	53	45	38	37	56	33	86	83
MO	M	130	131	135	270	272	273	284	271	278	289	284	279	282	279	278	116	97	42	37	87	41	81	112
NI	F	127	132	136	276	274	287	275	292	281	286	293	290	291	282	291	55	104	32	37	42	65	96	110
PE	M	121	131	114	259	262	287	263	269	269	286	293	282	284	286	282	72	104	36	51	55	76	71	115
PF	M	130	135	137	267	270	276	280	275	284	295	287	286	297	286	288	91	73	40	39	61	34	80	107
RA	M	125	130	130	256	263	273	280	266	271	286	287	274	282	278	278	91	66	45	31	76	45	78	54
RI	F	118	134	139	265	274	273	273	273	273	303	293	281	291	294	305	95	97	38	49	58	70	127	146
SA	F	129	133	128	254	267	267	275	271	284	307	296	288	280	276	295	72	76	44	33	53	54	50	104
SH	F	126	130	120	263	264	269	269	266	269	263	279	278	275	274	280	50	38	30	21	38	43	78	73
SM	M	118	120	112	259	238	266	255	271	265	267	270	275	276	275	282	51	47	28	27	30	30	100	44
TA	F	121	132	131	259	266	264	277	273	269	280	290	281	291	280	280	44	69	27	32	37	49	76	151
TH	F	126	125	126	256	269	283	284	266	275	286	282	279	288	288	291	66	43	34	19	39	22	77	68

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=30 LOCATION=RURAL CLASS NUMBER=14

STUDENT	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	M	131	122	116	269	266	288	287	271	262	260	274	275	279	265	267	51	59	32	27	37	41	101	80
BE	M	137	123	103	262	263	273	269	262	265	284	292	286	288	259	270	60	55	31	25	46	54	37	64
BF	M	140	127	116	264	263	271	271	281	296	287	276	284	288	273	284	48	86	29	34	40	65	43	51
DA	F	143	121	117	266	269	271	296	271	275	284	295	284	290	280	286	81	67	28	32	33	53	122	104
EC	M	140	114	90	265	267	284	296	268	271	277	289	291	299	282	276	43	60	33	41	25	43	72	98
FL	F	134	127	90	257	261	277	276	284	292	290	289	282	290	273	280	44	58	26	29	29	53	42	60
GA	M	132	116	100	274	274	280	287	273	284	293	274	288	286	286	282	36	38	24	21	32	44	26	49
HA	F	133	136	125	262	265	280	296	288	284	284	319	297	290	288	291	65	72	24	29	39	60	64	139
JO	M	137	115	119	265	257	280	279	275	275	268	289	284	288	271	279	43	56	26	38	40	55	78	76
LA	F	140	118	102	263	265	275	279	265	271	277	286	288	284	278	278	44	73	41	41	33	47	57	72
LE	F	138	124	102	263	267	273	276	284	271	277	307	291	286	273	288	42	62	37	38	42	37	48	87
LO	M	144	122	115	265	264	277	291	289	292	279	274	286	293	273	276	58	72	31	48	56	75	49	60
MA	F	139	113	123	260	263	269	271	269	278	265	298	284	286	278	278	58	67	39	41	46	47	46	67
MB	M	137	123	121	270	270	259	276	273	273	277	292	284	279	269	279	58	63	26	40	38	45	43	76
MC	F	131	129	116	251	261	264	271	271	273	270	283	291	303	278	282	41	50	23	33	25	30	48	39
MD	F	139	123	133	278	276	280	296	284	292	299	307	294	303	288	294	47	50	23	32	37	49	69	60
MI	F	133	126	130	265	259	275	302	273	275	272	280	284	290	288	291	36	59	25	32	36	53	59	47
MJ	F	140	120	93	259	264	273	273	275	281	270	283	288	299	280	266	47	54	32	38	39	50	93	56
NE	F	133	132	104	270	274	271	287	275	284	284	295	297	279	288	284	65	73	28	32	53	55	97	70
PA	M	133	125	120	267	267	269	283	275	292	296	307	286	293	299	284	40	37	21	20	42	37	48	45
RA	F	134	128	114	263	263	284	283	278	275	284	295	284	299	280	275	49	55	26	30	40	26	33	71
RH	M	130	135	122	265	279	288	324	269	281	284	298	294	303	282	294	73	84	31	41	54	70	85	82
SE	M	137	115	110	266	266	284	283	273	269	282	274	282	282	275	284	35	35	26	26	30	19	51	37
SH	F	133	133	128	269	272	267	283	284	288	293	292	284	290	282	286	36	52	25	28	32	37	60	48
SM	F	136	121	103	262	269	258	267	263	260	277	280	262	281	277	278	42	30	26	21	29	22	96	37
ST	F	141	124	124	265	269	280	287	281	296	287	298	286	296	280	282	71	72	26	27	29	35	62	68
WE	F	136	124	111	270	269	273	279	266	278	282	298	282	296	288	276	55	81	22	34	47	53	40	101
WI	M	143	118	135	274	282	273	317	281	296	284	315	301	306	282	291	65	74	43	35	49	65	84	96
WJ	F	136	126	123	276	267	293	283	271	281	279	303	297	288	299	279	37	83	17	25	22	74	13	98

CLASS CHARACTERISTICS
GRADE=4 CLASS SIZE=24 LOCATION=URBAN CLASS NUMBER=15

STUDENT	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	M	111	126	128	253	263	264	273	258	268	267	284	273	279	276	284	33	44	18	19	20	19	54	48
BO	F	112	131	124	256	264	262	263	249	258	267	290	264	271	276	277	60	70	32	32	30	30	61	57
BR	M	120	130	123	254	259	262	280	262	263	286	275	284	286	269	284	45	63	20	27	47	43	160	67
CH	M	111	123	120	258	276	259	266	253	261	278	303	278	279	276	284	41	39	29	19	32	31	34	55
CL	F	116	121	128	259	265	267	267	265	268	278	284	278	284	275	286	52	68	26	29	51	57	41	89
CO	M	110	134	122	261	278	276	262	266	278	274	287	275	291	275	284	51	35	28	21	25	29	64	32
FO	M	116	113	101	240	252	263	264	252	251	254	266	264	278	266	264	35	69	21	37	24	59	36	44
HA	M	115	131	129	256	267	260	267	268	263	286	282	278	284	274	277	39	58	28	20	27	44	34	46
HB	M	112	127	117	260	267	266	273	255	259	265	282	272	280	274	275	42	38	25	22	40	21	58	29
JO	F	107	137	128	254	267	267	275	262	266	283	279	274	282	282	275	58	71	29	39	47	56	68	94
KA	F	106	131	127	251	256	254	271	260	252	269	272	284	279	274	282	56	68	31	32	62	40	51	64
LY	F	117	129	125	258	260	269	269	258	261	286	272	278	273	269	262	48	32	21	26	37	14	93	147
MC	M	108	121	125	243	257	259	259	253	251	265	279	269	273	258	265	56	55	32	34	45	43	44	90
NE	M	114	126	130	267	264	262	269	260	265	267	270	279	280	276	282	57	61	33	38	49	50	106	113
PE	F	119	124	113	261	266	267	271	257	263	278	279	272	282	269	286	37	48	27	32	26	24	44	59
PF	F	117	133	116	253	263	283	277	260	278	298	299	303	294	282	291	66	62	31	34	49	34	58	54
PH	F	109	120	104	251	253	266	264	258	261	259	277	286	280	259	291	44	41	26	33	32	39	51	95
SA	F	110	126	97	249	250	260	266	249	246	259	263	274	282	274	261	42	49	26	27	37	40	52	90
SH	F	113	130	130	253	258	267	267	259	262	278	282	284	288	270	282	59	89	35	40	54	65	34	109
SI	F	114	123	117	252	251	269	263	254	260	271	290	273	288	270	280	49	73	21	33	44	36	39	90
ST	M	118	132	132	256	260	276	277	266	268	289	299	299	288	286	282	52	51	30	29	61	51	72	58
WI	F	110	131	121	245	258	257	264	258	254	283	270	273	274	272	264	47	63	33	33	43	60	69	86
WJ	F	112	128	129	249	258	271	275	257	271	286	287	290	297	270	278	72	75	30	40	69	78	36	75

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=16 LOCATION=RURAL CLASS NUMBER=16

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
BO	M	137	128	121	274	270	277	310	281	281	290	292	284	311	299	294	54	66	30	30	52	47	51	79
BP	F	142	127	125	267	272	280	287	273	292	296	311	301	306	291	294	49	67	27	24	55	83	54	101
BR	F	141	102	114	270	272	267	283	265	278	296	298	282	296	286	298	36	64	24	28	28	48	44	85
BS	M	138	122	132	272	279	275	287	273	284	284	295	291	296	277	284	30	45	15	20	40	44	29	99
CA	M	139	127	126	272	276	267	302	275	271	290	289	297	293	291	291	28	48	17	21	18	36	29	54
CL	F	140	116	113	278	282	284	287	273	281	282	307	284	282	295	303	32	35	18	27	22	29	47	46
DA	F	143	105	123	260	254	266	273	271	266	270	278	286	290	282	288	31	49	27	33	25	37	37	50
DE	M	137	121	117	269	276	284	266	275	278	279	271	276	290	266	275	32	60	14	28	27	44	29	69
DO	M	134	123	118	276	279	297	310	288	296	293	295	297	311	286	288	55	87	27	23	49	82	64	68
EL	F	133	104	131	264	260	266	273	261	265	268	283	279	279	273	284	39	58	22	20	35	54	46	115
MO	F	134	128	129	267	274	280	296	284	278	282	298	288	303	291	282	80	63	34	21	74	52	49	152
SH	M	136	130	111	267	270	275	276	278	281	279	286	294	293	291	269	49	85	28	34	31	54	28	55
TI	M	135	127	134	267	274	277	324	284	288	293	295	286	306	284	280	55	58	35	28	44	38	34	73
YA	M	136	113	113	269	272	275	287	275	278	287	292	284	288	305	269	35	59	21	28	29	28	31	91

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=28 LOCATION=URBAN CLASS NUMBER=17

STUDENT CHARACTERISTICS					MATH		SCIENCE		SOC STUD		READING		LISTEN		WRITING		FLUENCY		FLEX		ORIG		ELAB	
NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST	PRE	POST
AN	F	126	114	120	247	270	264	271	253	278	277	292	291	288	280	294	48	49	30	35	33	31	86	66
AR	F	126	138	116	264	266	269	287	268	278	265	278	294	296	273	288	49	65	31	32	50	46	66	59
BI	F	127	126	116	263	263	280	287	269	281	284	292	282	299	286	291	55	44	22	23	54	39	74	68
BL	M	125	132	127	278	276	284	310	284	300	303	292	309	303	320	294	10	19	9	15	15	21	47	38
BU	F	123	129	118	252	259	267	273	258	265	287	295	294	282	284	294	55	72	26	43	49	61	51	68
CA	F	123	132	140	256	261	269	276	257	273	260	274	271	288	278	286	71	72	40	27	59	54	120	120
CO	M	127	134	126	262	266	277	291	268	281	290	276	282	296	274	274	44	65	26	33	29	50	78	68
CR	F	123	127	120	267	259	264	271	263	284	275	289	288	303	286	284	47	88	15	32	28	59	80	79
EV	F	127	126	110	264	266	271	283	273	275	277	286	275	286	282	288	78	75	30	42	54	46	62	110
FR	M	130	123	109	264	263	273	271	260	271	277	286	278	282	275	275	35	42	24	26	26	33	75	57
HA	M	126	128	112	256	264	266	269	263	278	275	292	294	282	269	270	60	38	24	22	29	27	52	28
HB	M	120	130	118	265	264	284	291	275	275	284	289	284	286	280	278	58	45	24	22	38	51	89	92
HU	F	125	120	117	253	253	267	264	261	273	279	269	297	286	273	279	54	56	36	34	39	40	58	84
JA	M	131	122	107	266	263	275	276	258	284	270	289	291	293	277	288	62	50	27	30	45	36	59	103
KE	F	124	129	130	264	269	275	279	271	296	293	315	286	288	291	303	77	65	30	37	40	46	65	106
KL	F	118	125	125	266	265	273	271	257	258	284	280	288	273	284	278	30	30	19	15	31	23	87	51
KR	M	128	125	133	270	272	280	287	269	278	290	298	291	286	280	288	44	40	26	22	43	39	58	35
LU	M	129	129	98	265	264	275	287	268	271	284	289	280	288	284	286	59	67	32	15	39	26	65	27
LX	F	123	128	123	265	263	263	269	265	273	272	303	274	299	286	294	78	89	39	31	53	75	143	89
MO	F	125	133	137	256	261	273	283	275	292	279	283	291	290	291	279	49	61	33	28	36	48	135	60
PA	F	116	131	118	267	270	284	302	278	278	284	286	286	293	299	298	41	40	24	24	29	28	76	75
SH	M	123	129	129	265	272	269	296	275	269	277	280	288	284	291	288	61	81	36	35	41	70	43	82
SI	F	130	115	119	254	263	267	283	268	281	284	278	276	272	275	286	74	93	23	36	31	54	111	105
ST	F	127	123	124	262	265	269	279	256	275	279	289	275	281	288	291	54	64	41	27	52	52	76	69
SY	M	124	131	122	263	261	269	291	265	284	261	269	280	273	280	294	87	106	44	35	62	58	100	104
TI	F	129	128	123	266	264	266	296	266	275	287	292	278	288	280	288	40	55	22	36	28	34	103	47
TH	M	130	130	127	260	274	275	324	269	275	270	283	288	296	271	288	47	50	29	25	54	36	84	41
TY	F	128	133	127	272	264	269	283	269	288	282	289	282	288	286	276	59	57	26	33	33	20	41	62

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=23 LOCATION=URBAN CLASS NUMBER=18

STUDENT	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AL	F	137	126	119	267	269	271	283	275	292	293	303	309	303	291	291	53	66	28	37	34	25	76	115
BA	M	133	124	125	270	276	267	302	273	281	284	289	284	296	284	282	33	55	23	30	28	33	49	45
CU	F	141	119	124	265	267	269	302	273	281	290	303	297	303	305	303	52	68	19	33	27	56	54	88
DO	M	136	124	129	274	267	271	283	288	296	284	292	294	288	286	284	57	41	38	25	45	52	62	75
FP	M	129	128	134	276	282	277	302	275	288	287	303	297	303	291	291	33	97	19	29	42	58	118	79
GI	M	142	120	117	270	276	271	283	284	284	287	307	297	284	310	279	56	77	28	29	41	71	58	87
GJ	F	134	119	125	272	267	273	279	288	281	282	307	279	303	288	284	39	62	26	27	24	29	38	86
HA	M	141	123	116	274	272	288	302	266	281	284	303	304	299	295	288	88	94	47	42	77	66	81	117
HB	M	135	116	117	267	274	273	283	278	288	282	286	291	282	284	284	45	69	36	39	35	58	90	142
KN	F	141	122	125	267	282	273	302	292	281	290	303	297	299	286	288	68	103	34	43	67	75	61	178
KU	F	142	119	123	267	270	277	276	268	271	290	303	291	293	295	282	59	95	38	56	44	88	74	46
MA	F	141	127	125	274	282	288	317	281	281	303	315	297	306	291	288	51	77	31	42	44	66	63	81
PR	M	130	128	126	276	276	275	291	275	296	287	292	288	290	282	288	56	68	37	42	42	50	63	78
RO	F	134	128	121	259	265	267	283	271	281	282	298	301	303	286	288	52	69	34	42	41	53	51	102
RP	F	134	128	123	263	267	273	283	269	281	277	274	297	293	277	267	43	69	23	40	38	58	72	64
RS	M	132	129	134	282	282	277	317	284	296	303	315	301	303	310	294	39	32	26	26	23	32	65	47
SC	F	142	127	110	286	279	280	317	278	292	290	315	294	306	295	298	36	42	27	28	28	35	37	43
SD	F	137	122	117	267	267	275	283	266	273	287	298	282	299	282	291	69	77	30	44	51	55	126	101
TU	M	135	132	124	276	276	288	291	288	281	279	298	291	296	288	282	27	25	21	18	23	24	46	47
VI	F	130	121	119	252	258	263	271	260	266	282	307	309	282	291	284	46	92	31	44	49	77	115	81
WI	M	141	124	119	276	279	293	310	292	296	290	307	291	311	299	284	51	65	25	31	42	67	107	82
WO	F	133	132	128	270	279	267	279	278	281	290	289	286	290	291	294	52	74	26	42	21	58	80	102

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=26 LOCATION=RURAL CLASS NUMBER=19

STUDENT	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
BA	M	125	128	96	259	265	273	296	269	278	277	292	288	290	271	276	43	34	11	17	28	21	21	21
BE	F	124	130	138	265	270	271	296	273	281	275	292	294	303	295	280	46	66	29	33	30	50	53	89
BR	M	126	130	109	263	263	277	276	268	278	282	292	278	275	278	282	30	43	17	17	16	44	12	39
CA	F	128	120	127	258	265	269	296	273	271	299	283	284	290	277	282	39	51	27	30	32	41	39	97
CO	F	126	110	112	260	267	258	259	256	266	259	276	274	274	277	279	70	54	34	32	31	28	39	38
CP	F	124	130	121	251	261	260	266	262	269	270	280	280	282	273	280	53	51	27	31	46	51	68	88
DI	M	120	111	123	249	254	250	262	260	248	251	252	273	267	258	247	45	42	29	17	40	41	104	74
EZ	M	130	126	126	258	260	269	283	262	281	275	276	291	286	275	267	57	63	37	32	36	50	34	112
FI	M	122	128	127	242	257	263	271	271	271	282	292	274	274	275	262	20	28	14	12	30	25	75	118
GA	M	128	117	99	262	263	267	279	254	268	270	278	279	275	260	284	37	44	20	26	30	35	54	68
HA	M	124	100	114	246	254	239	258	265	262	245	276	280	303	257	260	20	32	14	18	25	33	35	64
HB	M	121	108	98	257	257	254	261	266	262	268	292	278	282	277	275	41	45	20	29	43	36	102	47
HE	F	128	129	133	265	265	275	291	268	278	284	311	291	293	286	284	57	77	35	45	52	73	71	86
HI	M	125	126	107	258	270	269	262	262	273	270	283	282	281	275	275	49	55	29	28	28	32	26	93
KE	F	120	126	111	262	265	266	276	266	273	284	289	276	290	273	279	36	49	26	31	24	30	58	38
LO	F	125	114	132	263	265	262	287	266	275	282	292	291	288	288	288	41	56	22	34	19	31	68	62
MC	M	130	117	109	260	256	267	267	263	278	275	283	274	281	277	272	57	62	19	30	30	42	40	74
MI	F	121	124	131	260	261	277	283	261	273	287	286	282	284	288	279	23	29	18	19	17	24	31	57
MO	F	121	117	113	256	258	261	263	268	266	275	280	279	286	282	279	28	40	17	32	18	27	47	84
PH	M	129	128	128	274	269	269	296	284	281	284	303	294	290	295	284	35	43	21	25	29	43	40	81
PO	F	123	112	121	258	265	257	259	253	253	256	269	273	272	265	276	37	57	23	38	14	23	33	84
RU	F	129	124	114	258	263	256	273	261	262	251	269	291	282	277	270	51	63	20	35	49	46	59	88
ST	F	121	125	121	244	254	250	260	262	268	277	289	269	279	273	274	39	46	17	26	22	38	74	84
TU	F	122	108	121	250	263	258	267	260	266	250	280	270	275	262	282	37	39	23	31	23	37	59	54
WI	F	127	117	116	254	260	267	276	271	271	277	286	288	278	265	276	39	60	24	36	41	55	75	103
WJ	F	122	117	109	257	258	262	267	254	259	275	271	286	278	268	272	47	59	27	37	44	49	61	36

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=25 LOCATION=URBAN CLASS NUMBER=20

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AM	M	127	131	117	267	269	280	269	268	284	279	286	291	286	275	279	42	64	27	37	38	52	56	44
BR	F	134	127	118	257	270	264	276	273	284	287	276	282	279	286	286	59	62	37	43	47	49	94	75
CA	M	142	113	101	269	264	269	267	268	273	265	274	279	274	275	284	42	46	23	28	24	24	58	84
CB	M	138	118	109	266	269	269	283	278	273	275	303	288	279	288	284	50	37	32	31	40	22	68	109
CH	M	131	127	125	272	276	277	291	281	292	296	289	288	290	305	294	53	55	36	33	41	51	90	82
CO	F	134	103	107	258	265	258	267	260	269	275	289	273	266	271	280	63	68	39	45	45	53	56	75
CR	F	132	126	129	272	270	275	276	271	271	272	276	284	279	278	286	44	70	26	36	32	42	50	42
CU	F	142	126	97	269	272	288	296	288	275	279	298	297	303	295	294	63	81	43	44	46	73	65	83
DA	M	138	117	108	260	269	264	296	266	300	290	303	280	279	291	288	31	33	21	21	26	30	45	35
DB	F	140	118	122	274	270	273	283	271	271	282	292	304	293	288	288	70	85	48	45	47	64	69	119
GL	F	137	129	128	260	270	273	273	266	275	275	295	282	296	291	286	50	67	28	43	31	62	88	53
JO	F	136	123	93	254	256	273	264	268	271	266	286	280	296	286	274	67	77	34	44	38	48	70	59
KA	F	129	120	121	263	276	275	279	275	265	272	311	284	286	284	282	62	67	37	34	48	63	77	101
KE	F	134	127	113	257	261	269	266	266	266	277	271	282	276	275	280	59	87	32	48	39	75	42	101
LO	F	144	128	119	269	276	269	291	275	281	282	298	309	306	291	291	47	69	31	41	32	52	95	105
MU	F	136	130	131	286	270	293	310	278	278	290	298	288	281	284	284	29	64	19	36	14	38	54	36
PR	M	125	131	120	259	272	269	287	275	284	279	292	284	296	288	291	56	76	34	48	33	67	41	40
RO	M	135	122	121	270	272	271	287	278	281	284	292	282	293	277	280	36	57	18	24	29	42	15	76
RP	F	131	122	123	267	267	260	276	273	262	290	295	282	276	286	286	63	73	37	43	25	45	65	32
ST	F	136	115	113	262	253	271	273	262	266	279	265	286	282	288	279	79	81	43	45	53	41	61	64
TR	M	137	128	121	276	274	284	302	288	292	303	311	304	306	305	294	53	63	31	34	53	55	82	84
VA	M	139	127	108	264	279	277	296	265	288	290	303	288	303	278	291	51	82	27	46	53	66	60	101
WA	F	139	127	126	276	282	288	291	275	292	293	311	309	299	305	298	55	67	37	43	38	54	46	77
WH	M	136	111	107	278	270	266	302	271	284	287	278	291	282	282	282	29	44	25	31	21	30	37	51
WI	F	137	125	119	269	279	273	291	278	281	296	292	309	303	299	294	50	66	24	42	40	61	58	96

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=28 LOCATION=URBAN CLASS NUMBER=21

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
AT	M	121	108	126	259	264	269	273	253	268	274	282	284	276	275	288	97	87	41	46	70	68	29	55
AZ	F	122	132	121	260	267	271	273	266	271	303	284	293	280	288	288	90	84	43	45	75	68	102	118
HR	M	125	126	122	258	267	269	261	266	278	289	284	281	284	272	278	53	83	34	38	46	59	139	108
HY	M	121	127	134	267	265	279	271	273	271	289	282	284	291	278	269	79	75	43	33	42	55	82	97
CH	M	125	128	127	254	266	267	273	265	261	280	293	284	294	280	295	65	58	32	28	51	42	95	132
CI	M	124	126	118	256	266	266	277	265	269	283	284	290	291	284	291	45	73	29	34	41	49	76	61
CL	M	121	125	117	263	264	287	269	268	271	280	287	288	282	270	278	50	74	27	30	14	36	146	119
DU	M	120	135	133	258	263	279	264	278	271	280	284	284	284	274	273	29	50	20	33	28	43	73	57
DX	M	125	135	127	266	272	271	271	271	269	292	290	293	288	275	288	63	88	32	37	49	62	84	99
EA	M	130	128	127	265	278	273	266	288	275	298	296	293	297	276	291	35	27	26	17	34	20	58	55
GE	M	122	132	130	264	282	279	277	281	281	292	293	284	294	284	295	60	57	36	41	58	52	74	57
GU	M	129	126	110	251	264	266	273	265	262	274	275	279	279	272	282	47	52	31	29	36	44	49	133
HA	M	122	122	134	266	278	264	273	269	266	283	290	293	297	291	291	67	50	44	34	42	37	124	115
JO	M	125	127	132	263	276	267	263	266	275	289	261	272	280	276	278	81	91	32	30	47	54	62	57
LO	M	127	119	102	253	264	249	261	269	258	253	284	276	280	278	286	65	49	39	26	57	42	67	75
MI	M	128	121	101	260	265	271	275	261	266	280	277	286	288	284	299	66	65	29	46	39	50	80	94
MJ	F	130	126	119	267	266	276	271	259	269	298	279	290	291	276	280	93	79	35	26	79	57	59	75
MU	M	128	124	120	263	272	287	284	275	284	283	282	282	294	282	286	46	57	29	40	48	35	54	97
NA	M	132	126	123	264	269	276	288	273	275	286	290	303	301	275	291	47	37	30	27	36	17	82	80
OL	F	126	120	123	261	267	266	277	262	275	269	293	273	294	275	284	45	66	26	34	30	38	81	132
SA	M	118	135	122	265	270	302	280	288	281	289	296	290	297	284	291	67	63	42	35	48	46	80	94
SP	M	120	123	123	252	256	271	284	273	275	271	293	284	288	265	275	51	50	27	29	28	59	59	144
TI	F	129	124	123	263	270	291	269	263	284	286	287	293	297	278	280	76	99	43	55	53	74	87	102
TJ	F	126	125	124	260	269	269	266	271	278	298	296	282	288	288	295	50	72	36	42	31	42	67	87
WE	F	124	127	119	256	267	263	262	257	257	280	293	282	291	280	286	55	51	36	34	33	34	113	103
WF	F	126	134	129	265	274	269	280	271	271	298	296	286	284	272	295	76	84	51	44	50	65	121	105
WI	F	123	136	126	265	266	276	280	262	271	292	284	293	297	286	295	90	91	54	49	70	68	124	96
WJ	M	123	124	133	265	263	273	275	269	273	283	284	275	279	278	288	56	73	28	32	38	44	43	59

CLASS CHARACTERISTICS
GRADE=5 CLASS SIZE=21 LOCATION=URBAN CLASS NUMBER=22

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SOC STUD PRE	SOC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
CA	M	128	121	115	267	272	273	297	271	275	283	287	290	309	288	286	0	0	0	0	0	0	0	0
CH	M	129	129	121	269	269	283	273	273	271	295	290	286	284	286	286	0	0	0	0	0	0	0	0
EV	F	117	122	125	256	269	279	275	271	275	286	293	279	291	274	291	0	0	0	0	0	0	0	0
FI	M	122	128	119	257	265	273	284	265	275	278	290	299	280	282	278	0	0	0	0	0	0	0	0
HO	F	130	131	137	261	263	283	277	281	278	319	299	303	314	298	295	0	0	0	0	0	0	0	0
LA	F	128	133	123	258	264	287	275	271	273	289	296	288	294	275	264	0	0	0	0	0	0	0	0
MI	M	129	131	110	267	270	276	275	273	273	286	299	290	286	284	299	0	0	0	0	0	0	0	0
MO	M	120	135	139	270	270	271	275	281	275	295	284	296	286	279	282	0	0	0	0	0	0	0	0
MP	F	127	127	113	256	270	269	288	275	271	276	287	286	286	280	280	0	0	0	0	0	0	0	0
PR	F	119	135	123	260	263	271	275	273	278	276	293	282	279	280	286	0	0	0	0	0	0	0	0
RE	M	128	118	122	272	276	264	267	286	275	292	282	279	278	286	291	0	0	0	0	0	0	0	0
RF	F	130	132	130	270	269	310	280	284	278	298	293	306	314	288	310	0	0	0	0	0	0	0	0
RO	F	131	132	127	266	269	283	277	278	278	292	290	288	297	286	295	0	0	0	0	0	0	0	0
RY	M	122	136	119	261	259	279	275	269	275	280	275	290	291	267	284	0	0	0	0	0	0	0	0
SC	M	127	130	131	258	263	283	284	296	284	283	284	293	304	284	299	0	0	0	0	0	0	0	0
ST	F	126	133	145	266	270	283	293	271	273	286	290	306	304	294	310	0	0	0	0	0	0	0	0
SU	M	129	131	134	264	274	287	271	271	269	278	268	288	294	278	286	0	0	0	0	0	0	0	0
SX	M	125	107	117	267	269	273	280	265	281	280	303	274	304	262	278	0	0	0	0	0	0	0	0
TI	M	119	132	126	270	263	317	288	278	281	289	275	306	294	274	277	0	0	0	0	0	0	0	0
WI	F	127	134	133	269	265	283	277	273	275	289	293	282	294	280	291	0	0	0	0	0	0	0	0

CLASS CHARACTERISTICS
GRADE=6 CLASS SIZE=25 LOCATION=URBAN CLASS NUMBER=23

STUDENT CHARACTERISTICS

NAME	SEX	AGE MOS	IQ NON-VERB	IQ VERB	MATH PRE	MATH POST	SCIENCE PRE	SCIENCE POST	SnC STUD PRE	SnC STUD POST	READING PRE	READING POST	LISTEN PRE	LISTEN POST	WRITING PRE	WRITING POST	FLUENCY PRE	FLUENCY POST	FLEX PRE	FLEX POST	ORIG PRE	ORIG POST	ELAB PRE	ELAB POST
BA	M	139	126	136	272	266	271	275	275	278	298	293	290	291	294	282	0	0	0	0	0	0	0	0
BE	M	137	128	126	267	270	279	277	271	273	289	279	284	288	286	291	0	0	0	0	0	0	0	0
BR	M	137	150	150	274	274	287	288	281	284	303	296	299	309	291	310	0	0	0	0	0	0	0	0
MU	M	136	135	132	276	262	273	277	296	278	292	282	311	301	279	288	0	0	0	0	0	0	0	0
CL	M	141	131	140	267	276	279	280	273	284	289	290	282	297	288	295	0	0	0	0	0	0	0	0
DA	M	138	136	125	272	269	287	275	292	281	298	287	303	294	294	295	0	0	0	0	0	0	0	0
DR	M	130	149	168	270	278	287	288	288	273	303	290	290	288	288	282	0	0	0	0	0	0	0	0
HA	F	137	142	122	272	278	283	277	289	278	307	303	306	309	288	288	0	0	0	0	0	0	0	0
HU	F	137	138	138	267	270	279	277	271	268	295	299	288	288	288	291	0	0	0	0	0	0	0	0
LY	M	135	130	140	272	270	296	284	278	281	274	296	296	282	270	286	0	0	0	0	0	0	0	0
MA	M	142	135	146	279	282	302	280	278	292	295	293	306	294	279	295	0	0	0	0	0	0	0	0
MB	M	120	149	158	267	270	266	264	273	263	286	277	288	294	270	288	0	0	0	0	0	0	0	0
OA	F	133	136	130	274	265	273	275	275	273	298	299	296	291	291	305	0	0	0	0	0	0	0	0
PA	M	139	117	162	282	286	317	293	281	278	307	293	306	294	282	286	0	0	0	0	0	0	0	0
PB	M	138	131	125	265	259	279	275	275	288	298	279	288	294	276	280	0	0	0	0	0	0	0	0
PC	M	135	135	115	274	266	283	280	288	281	298	282	296	297	276	284	0	0	0	0	0	0	0	0
PH	F	139	130	120	258	267	273	266	269	269	280	290	284	297	288	282	0	0	0	0	0	0	0	0
RE	F	140	148	129	276	270	291	284	296	284	311	293	303	304	291	315	0	0	0	0	0	0	0	0
RO	M	133	147	164	274	276	287	288	278	281	295	277	290	282	282	277	0	0	0	0	0	0	0	0
SH	M	139	144	148	276	282	317	277	288	281	286	296	282	304	291	286	0	0	0	0	0	0	0	0
SM	M	134	148	107	265	267	296	288	281	281	298	299	296	297	286	288	0	0	0	0	0	0	0	0
WA	M	141	123	146	272	276	279	273	281	271	295	290	279	294	279	295	0	0	0	0	0	0	0	0
WE	M	136	135	132	276	278	276	284	275	288	278	277	275	291	276	286	0	0	0	0	0	0	0	0
WI	M	135	154	115	269	272	287	280	275	288	307	290	311	294	286	291	0	0	0	0	0	0	0	0
WJ	F	139	144	120	264	269	283	269	284	271	298	287	293	288	294	299	0	0	0	0	0	0	0	0